

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



**SPECIFICATIONS**

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020

**MATERIALS**

Concrete:  
Shotcrete..... See Special Provisions

Reinforcing Steel..... ASTM A 615/A 615M, Grade 60

**BASIC DESIGN STRESSES**

Shotcrete..... See Special Provisions

Reinforcing Steel.....  $f_y = 60,000$  psi

**TRAFFIC DATA**

Bridge St. (Local Road)  
Current (2017) AADT..... 630  
Future (2037) AADT..... 760

Water St. (Local Road)  
Current AADT..... 638

**LIST OF DRAWINGS**

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## CARIBOU AROOSTOOK COUNTY CARIBOU STREAM BRIDGE OVER CARIBOU STREAM BRIDGE STREET STATE PROJECT NO. 18984.00 BRIDGE NO. 0181

**UTILITIES**

Caribou Utilities District (Underground)  
Caribou, City of (Underground)  
Charter Communications  
Consolidated Communications of Northern New England Company LLC  
Firstlight  
Versant Power

**MAINTENANCE OF TRAFFIC**

See Special Provisions

<b>PROJECT LOCATION:</b>	Caribou Stream Bridge Bin Wall - Caribou Stream Bridge (#0181) over Caribou Stream. Located 0.02 of a mile south of Water Street Lat/Long 46°51'27.4" N, 68°-00'-21.5" W
<b>PROGRAM AREA:</b>	Bridge Program
<b>OUTLINE OF WORK:</b>	Rehabilitation of steel bin wall adjacent to Bridge 0181

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER: <i>[Signature]</i>		4/27/23
DEPT. CHIEF ENGINEER: <i>[Signature]</i>		

STATE OF MAINE  
MARK GRAY  
No. 3997  
LICENSED PROFESSIONAL ENGINEER

SIGNATURE: *[Signature]*  
P.E. NUMBER: ME 3997  
DATE: 6-27-2023

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	MICHAEL WIGHT
DESIGNER	MARK GRAY
CONSULTANT	N/A
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

CARIBOU STREAM BRIDGE

TITLE SHEET

SHEET NUMBER

1

OF 10

WIN 18984.00

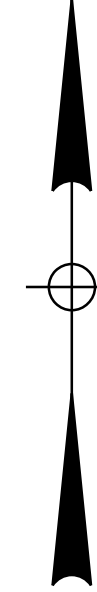
Filename: \\00\BRIDGE\MSTA\001\_Title.dgn    Division: BRIDGE    Username: Richard.Mayer    Date: 6/26/2023

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.061	DISPOSAL OF ASBESTOS CONTAINING BIN WALL (REMOVED ELEMENTS)	0.5	T
202.079	ASBESTOS MANAGEMENT PLAN	1	LS
203.2318	DISPOSAL OF SPECIAL WASTE	80	T
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (125 SY)	1	LS
606.1301	3"W-BM GR, MID-WAY SPLICE-SGL FACED	63	LF
606.1303	3"W-BM GR, MID-WAY SPLICE-15' RAD AND LESS	25	LF
606.1304	3"W-BM GR, MID-WAY SPLICE-OVER 15' RAD	18	LF
606.265	TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	1	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	2	EA
607.25	REMOVE AND RESET CHAIN LINK FENCE	134	LF
610.16	HEAVY RIPRAP	165	CY
615.07	LOAM	32	CY
618.13	SEEDING METHOD NUMBER 1	3	UN
618.141	SEEDING METHOD NUMBER 3	3	UN
619.12	MULCH	3	UN
619.14	EROSION CONTROL MIX	31	CY
620.58	EROSION CONTROL GEOTEXTILE	202	SY
627.55	12" TEMPORARY PAVEMENT TAPE, WHITE	30	LF
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
636.400	SOIL NAIL WALL DESIGN	1	LS
636.411	SOIL NAIL WALL	1096	SF
636.42	VERIFICATION TEST - SOIL NAILS	2	EA
636.421	PROOF TEST - SOIL NAILS	2	EA
636.425	SOIL NAIL EQUIPMENT MOBILIZATION	1	LS
639.19	FIELD OFFICE TYPE B	1	EA
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	20	EA
652.34	CONE	20	EA
652.35	CONSTRUCTION SIGNS	150	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (60 CD)	1	LS
652.38	FLAGGER	240	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

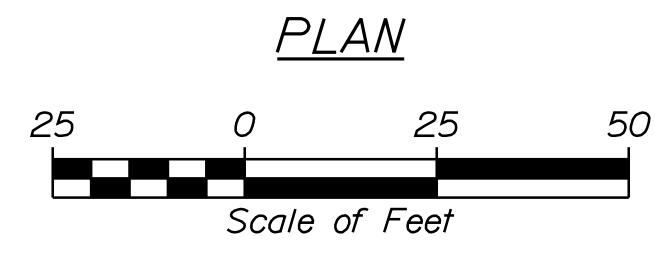
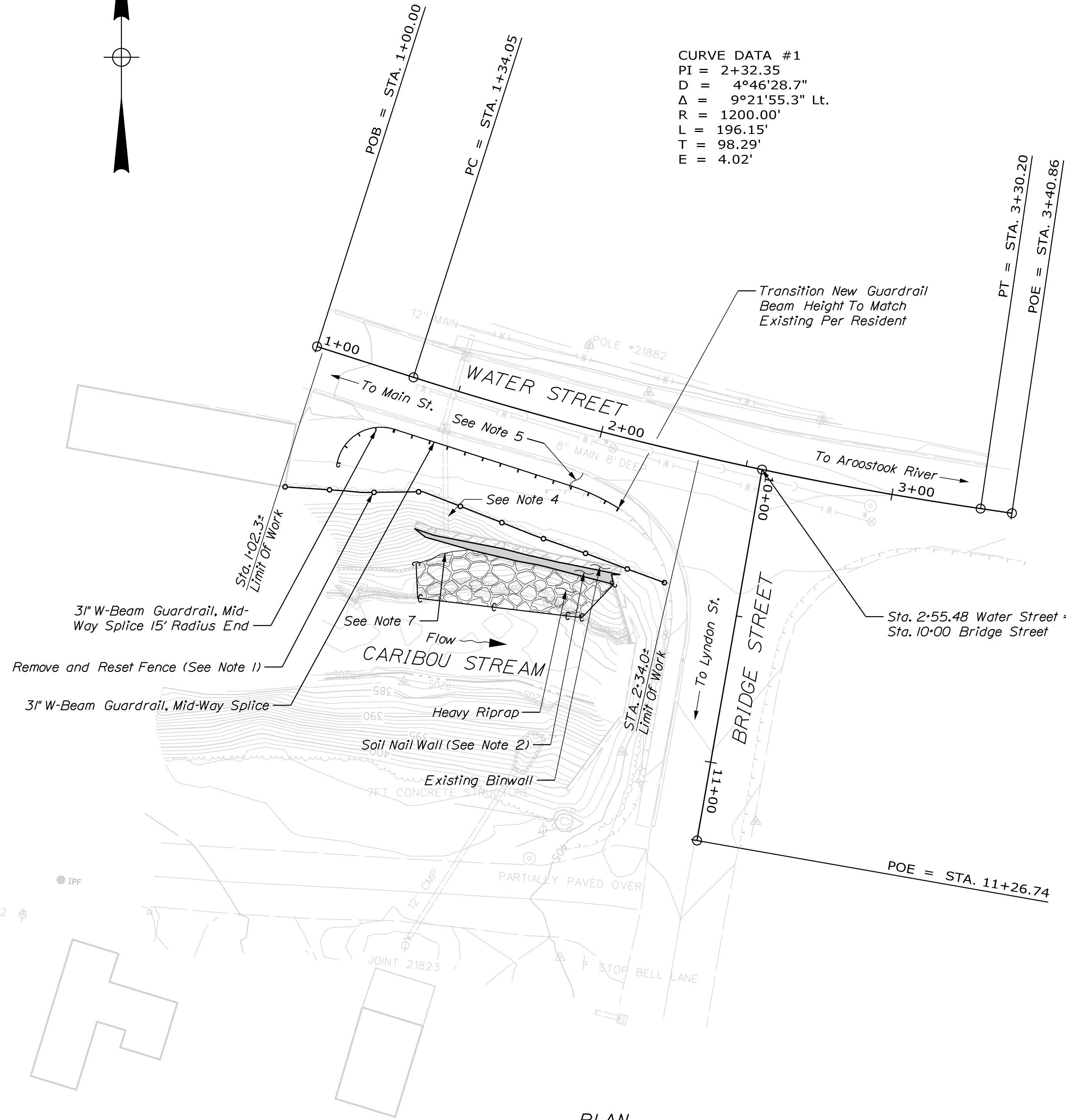
**GENERAL CONSTRUCTION NOTES**

- For easements, construction limits and right of way lines, refer to Right of Way Map.
- The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Place loam 4 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- The project geotechnical report titled: Geotechnical Data Report for the Rehabilitation of Caribou Stream Bridge, Bridge Street over Caribou Stream, Caribou, Maine, Soils Report 2023-11, May 26, 2023, may be accessed at the MaineDOT web address.
- Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.
- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
  - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
  - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
  - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.
- Overspray of shotcrete onto adjacent surfaces shall be removed at the Contractor's expense.
- Removal and disposal of existing guardrail shall not be paid for directly. Payment shall be considered incidental to related contract items.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
18984.00		WIN 18984.00	
BRIDGE NO. 0181		BRIDGE PLANS	
PROJ. MANAGER	MIKE WRIGHT	BY	R. MAYER
DESIGN-DETAILED	M. GRAY	DATE	JUNE 2023
CHECKED-REVIEWED		SIGNATURE	
DESIGN-DETAILED		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
CARIBOU STREAM BRIDGE			
CARIBOU STREAM			
AROOSTOOK COUNTY			
ESTIMATED QUANTITIES & GENERAL CONSTRUCTION NOTES			
SHEET NUMBER			
2			
OF 10			



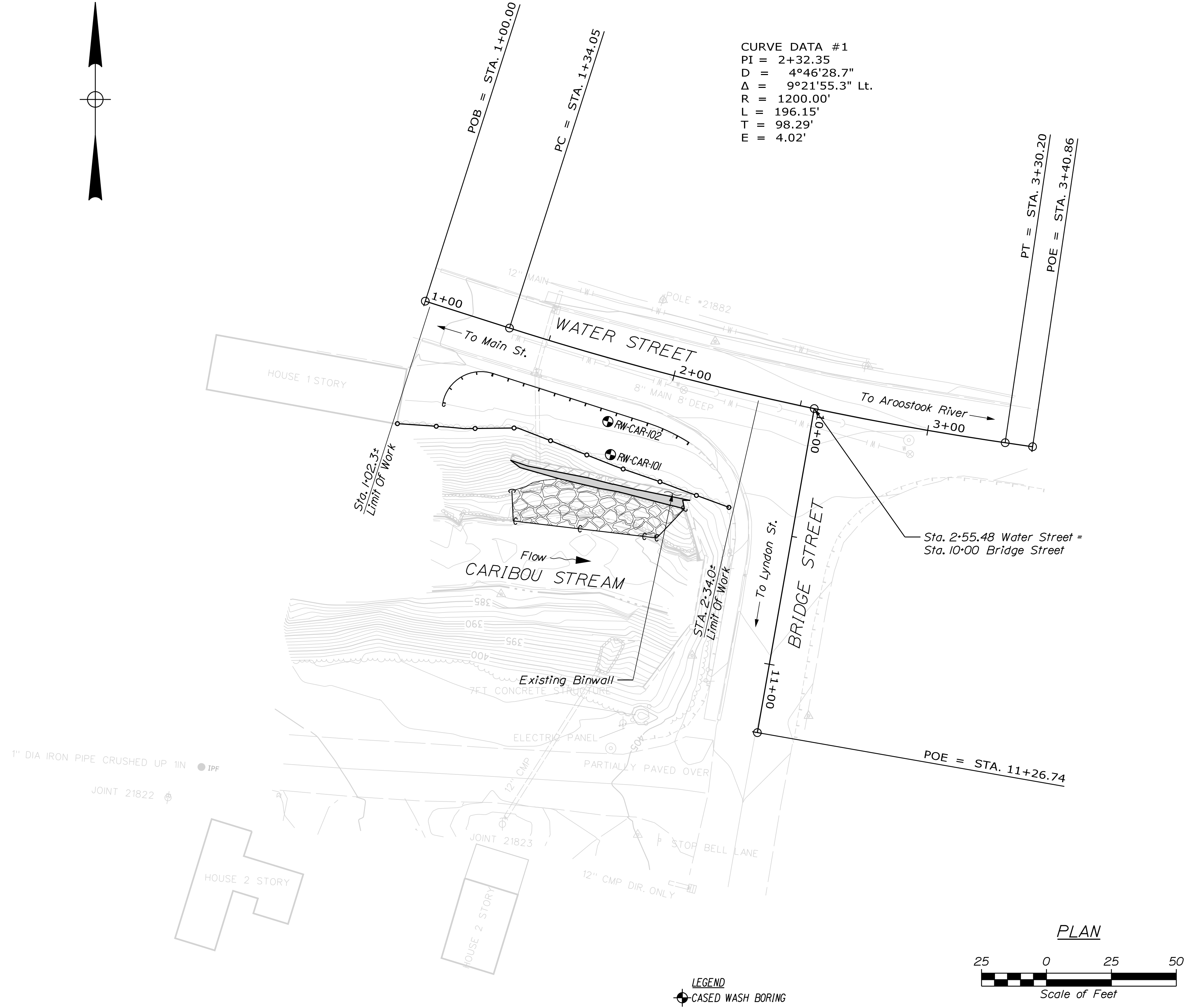
**CURVE DATA #1**  
 PI = 2+32.35  
 D = 4°46'28.7"  
 Δ = 9°21'55.3" Lt.  
 R = 1200.00'  
 L = 196.15'  
 T = 98.29'  
 E = 4.02'



**NOTES:**

1. Remove painted black 4' chain link fence owned by Property Owner as needed. Reset as directed by the Resident. This Work Shall be Paid for Under Item No. 607.25 Remove and Reset Chain Link Fence.
2. Water Street Sta. 1+49.3±, 48.5± Ft. Rt. to Sta. 2+17.5±, 45.0± Ft. Rt. Install Soil Nail Wall
3. Area to be cleared of vegetation includes sloping area between the existing fence and the top of the bin wall. Removing stumps is optional as required to provide construction access. Avoid disturbing stable ground cover on steep slopes. Apply Erosion Control Mix as necessary. Remove vegetation as required to install Heavy Riprap below the binwall.
4. Protect existing catch basin outlet pipe to remain.
5. Protect existing sidewalk, curb and roadway pavement. Damage due to construction operations shall be restored at the Contractor's expense.
6. Install Riprap to avoid damage to new Soil Nail Wall.
7. Top of Riprap @ Elevation 390 along Soil Nail Wall.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		18984.00	
CARIBOU STREAM BRIDGE		CARIBOU STREAM		CARIBOU	
CARIBOU		AROOSTOOK COUNTY		GENERAL PLAN	
SHEET NUMBER		3		OF 10	
PROJ. MANAGER	MIKE WIGHT	BY	R. MAYER	DATE	JUNE 2023
DESIGN-DETAILED	M. GRAY	CHECKED-REVIEWED		SIGNATURE	
DESIGN-DETAILED		DESIGN-DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES					
BRIDGE NO. 0181		WIN		18984.00	
BRIDGE PLANS					



STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		1898400	
CARIBOU STREAM BRIDGE		CARIBOU STREAM		CARIBOU	
CARIBOU		AROOSTOOK COUNTY		BORING LOCATION PLAN	
SHEET NUMBER		4		OF 10	
PROJ. MANAGER	MIKE WIGHT	BY	DATE	SIGNATURE	P.E. NUMBER
DESIGN-DETAILED	M. GRAY	R. MAYER	JUNE 2023		
CHECKED-REVIEWED	N. PIKAY	T. WHITE	MAY 2023		
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					
BRIDGE NO. 0181		WIN		18984.00	
BRIDGE PLANS					

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: Retaining Wall Replacement, Adjacent to Bridge #0181 Location: Bridge St @ Water St Caribou, ME		Boring No.: RW-CAR-101						
Drilling Contractor: N.E.B.C.		Elevation (ft.): 408.05		Auger ID/OD: 4" Solid Stem						
Operator: Chris/Devon		Datum: NAVD88		Sampler: Standard Split Spoon						
Logged By: S. Madden		Rig Type: Mobile B-53		Hammer Wt./Fall: 140lbs/30"						
Date Start/Finish: 7/26/2016-7/27/2016		Drilling Method: Solid Stem Auger/Drive and Wash		Core Barrel: NX Core						
Boring Location: 1+82.44, 35.72R		Casing ID/OD: 4.5"/4"		Water Level*: 24' 3"						
<small>           Definitions: S = Split Spoon Sample, MU = Unsuccessful Thin Wall Tube Sample Attempt, WIP = Weight of 1 Person, S<sub>u</sub> = Peak/Retained Field Vane Undrained Shear Strength (psf), B = Bucket Sample off Auger Flights, SSA = Solid Stem Auger, S<sub>u(Lab)</sub> = Lab Vane Undrained Shear Strength (psf), LL = Liquid Limit, MD = Unsuccessful Split Spoon Sample Attempt, HSA = Hollow Stem Auger, q<sub>u</sub> = Unconfined Compressive Strength (ksf), PL = Plasticity Limit, U = Thin Wall Tube Sample, RC = Roller Cone, N-value = Raw Field SPT N-value, MW = Unsuccessful Field Vane Shear Test Attempt, W<sub>100</sub> = Weight of 100lb. Hammer, T<sub>v</sub> = Pocket Torque Shear Strength (psf), V = Field Vane Shear Tests, PPA = Pocket Penetrometer, WPC = Water Contents, percent, BS = Similar or Equal Top, C = Consolidation Test         </small>										
Depth (ft.)	Sample No.	Pen./Rec. (in)	Sample Depth (ft.)	Blows (1/6 in) Shear Strength (ksf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0	S1	24/6	0.00 - 2.00	1-7-10-14	17	SSA			Top 2" grass/topsoil. Brown, moist, medium dense SAND, some subangular gravel, trace silt, fine-coarse grained sand, fine-coarse grained gravel, non-plastic fines, SW-SM, trace root material and wood (FILL)	
5	S2	24/14	5.00 - 7.00	5-14-10-14	24				Brown, moist, medium dense SAND, some subangular gravel, trace silt, fine-coarse grained sand, fine-coarse grained gravel, non-plastic fines, SW-SM, asphalt pieces, wood (FILL)	
	S3	24/8	7.00 - 9.00	12-10-9-10	19				Greyish brown, moist, medium dense GRAVEL, trace sand, trace silt, angular to subangular, fine-coarse grained gravel, fine sand, non-plastic fines, GW, (FILL)	
10	S4	24/6	10.00 - 12.00	13-7-9-8	16	Wash			Greyish brown, moist, medium dense GRAVEL, trace silt, trace sand, angular to subangular, fine-coarse grained gravel, fine sand, non-plastic fines, GW, (FILL)	
15	S5	24/6	15.00 - 17.00	11-7-7-9	14				Greyish brown, wet, medium dense, sandy GRAVEL, little silt, angular to subangular, fine-coarse grained gravel, fine sand, non-plastic fines, GW, (FILL)	GS386514 A-1-B, GM
20	S6	24/6	20.00 - 22.00	7-13-9-9	22				Greyish brown, wet, medium dense GRAVEL, trace silt, trace sand, angular to subangular, fine grained gravel, non-plastic fines, GW, majority of sample is wood fragments, up to 3" long (FILL).	
22	S7	24/3	22.00 - 24.00	19-19-21-20	40				Brownish grey, wet, dense, sandy GRAVEL, some silt, fine-coarse grained gravel, angular to subangular, fine-medium sand, non-plastic fines, GM (TILL)	GS386515 A-1-B, GM
<small>           Remarks: Water level measured at 7:15 AM on 7/27/16 with casing installed to 27 feet.         </small>										
<small>           Stratification lines represent approximate boundaries between soil types; transitions may be gradual.         </small>										Page 1 of 2
<small>           * Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.         </small>										Boring No.: RW-CAR-101

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: Retaining Wall Replacement, Adjacent to Bridge #0181 Location: Bridge St @ Water St Caribou, ME		Boring No.: RW-CAR-101						
Drilling Contractor: N.E.B.C.		Elevation (ft.): 408.05		Auger ID/OD: 4" Solid Stem						
Operator: Chris/Devon		Datum: NAVD88		Sampler: Standard Split Spoon						
Logged By: S. Madden		Rig Type: Mobile B-53		Hammer Wt./Fall: 140lbs/30"						
Date Start/Finish: 7/26/2016-7/27/2016		Drilling Method: Solid Stem Auger/Drive and Wash		Core Barrel: NX Core						
Boring Location: 1+82.44, 35.72R		Casing ID/OD: 4.5"/4"		Water Level*: 24' 3"						
<small>           Definitions: S = Split Spoon Sample, MU = Unsuccessful Thin Wall Tube Sample Attempt, WIP = Weight of 1 Person, S<sub>u</sub> = Peak/Retained Field Vane Undrained Shear Strength (psf), B = Bucket Sample off Auger Flights, SSA = Solid Stem Auger, S<sub>u(Lab)</sub> = Lab Vane Undrained Shear Strength (psf), LL = Liquid Limit, MD = Unsuccessful Split Spoon Sample Attempt, HSA = Hollow Stem Auger, q<sub>u</sub> = Unconfined Compressive Strength (ksf), PL = Plasticity Limit, U = Thin Wall Tube Sample, RC = Roller Cone, N-value = Raw Field SPT N-value, MW = Unsuccessful Field Vane Shear Test Attempt, W<sub>100</sub> = Weight of 100lb. Hammer, T<sub>v</sub> = Pocket Torque Shear Strength (psf), V = Field Vane Shear Tests, PPA = Pocket Penetrometer, WPC = Water Contents, percent, BS = Similar or Equal Top, C = Consolidation Test         </small>										
Depth (ft.)	Sample No.	Pen./Rec. (in)	Sample Depth (ft.)	Blows (1/6 in) Shear Strength (ksf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
25	S8	9/6	25.00 - 25.75	50-100/3"	100				Brownish grey, wet, dense, sandy GRAVEL, some silt, fine-coarse grained gravel, angular to subangular, fine-medium sand, non-plastic fines, GM (TILL)	GS386515 A-1-B, GM
	R1	30/30	27.00 - 29.50		RQD = 0%		381.05		R1: Grey, fine-grained, #1" to #2" fragments of fractured limestone, moderate to severe weathering, steep dipping (60°), calcite infilling, rock mass quality: very poor, 100% Recovery. R1: Core Times (min/ft): 1:45/4:43/3:56	
30	R2	18/18	29.50 - 31.00		RQD = 0%				R2: Grey, fine-grained, #1" to #2" fragments of fractured limestone, moderate to severe weathering, steep dipping (60°), calcite infilling, clay/silt infilling, rock mass quality: very poor, 100% Recovery. R2: Core Times (min/ft): 1:37/1:52	
	R3	18/18	31.00 - 32.50		RQD = 0%				R3: Grey, fine-grained, #1" to #2" fragments of fractured limestone, moderately severe weathering, steep dipping (60°), calcite infilling, clay/silt infilling, rock mass quality: very poor, 100% Recovery. R3: Core Times (min/ft): 3:14/2:05	
	R4	33/33	32.50 - 35.25		RQD = 27%				R4: Grey, fine-grained, #1" to #2" fragments of fractured limestone, moderate to severe weathering, steep dipping (60°), calcite infilling, clay infilling, rock mass quality: very poor, 100% Recovery. R4: Core Times (min/ft): 4:42/3:35/2:12	GS386515 A-1-B, GM
35	R5	21/21	35.25 - 37.00		RQD = 0%				R5: Grey, fine-grained, #1" to #2" fragments of fractured limestone, moderate to severe weathering, steep dipping (60°), calcite infilling, clay infilling, rock mass quality: very poor, 100% Recovery. R5: Core Times (min/ft): 2:14/2:52	
40									Bottom of Exploration at 37.0 feet below ground surface.	
45										
50										
<small>           Remarks: Water level measured at 7:15 AM on 7/27/16 with casing installed to 27 feet.         </small>										
<small>           Stratification lines represent approximate boundaries between soil types; transitions may be gradual.         </small>										Page 2 of 2
<small>           * Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.         </small>										Boring No.: RW-CAR-101

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: Retaining Wall Replacement, Adjacent to Bridge #0181 Location: Bridge St @ Water St Caribou, ME		Boring No.: RW-CAR-102						
Drilling Contractor: N.E.B.C.		Elevation (ft.): 409.30		Auger ID/OD: 2-25"/5.625"						
Operator: Chris/Devon		Datum: NAVD88		Sampler: Standard Split Spoon						
Logged By: S. Madden		Rig Type: Mobile B-53		Hammer Wt./Fall: 140lbs/30"						
Date Start/Finish: 7/27/2016		Drilling Method: Hollow Stem Auger		Core Barrel:						
Boring Location: 1+80.20, 23.69R		Casing ID/OD:		Water Level*: 22'						
<small>           Definitions: S = Split Spoon Sample, MU = Unsuccessful Thin Wall Tube Sample Attempt, WIP = Weight of 1 Person, S<sub>u</sub> = Peak/Retained Field Vane Undrained Shear Strength (psf), B = Bucket Sample off Auger Flights, SSA = Solid Stem Auger, S<sub>u(Lab)</sub> = Lab Vane Undrained Shear Strength (psf), LL = Liquid Limit, MD = Unsuccessful Split Spoon Sample Attempt, HSA = Hollow Stem Auger, q<sub>u</sub> = Unconfined Compressive Strength (ksf), PL = Plasticity Limit, U = Thin Wall Tube Sample, RC = Roller Cone, N-value = Raw Field SPT N-value, MW = Unsuccessful Field Vane Shear Test Attempt, W<sub>100</sub> = Weight of 100lb. Hammer, T<sub>v</sub> = Pocket Torque Shear Strength (psf), V = Field Vane Shear Tests, PPA = Pocket Penetrometer, WPC = Water Contents, percent, BS = Similar or Equal Top, C = Consolidation Test         </small>										
Depth (ft.)	Sample No.	Pen./Rec. (in)	Sample Depth (ft.)	Blows (1/6 in) Shear Strength (ksf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0	S1	24/12	0.00 - 2.00	1-6-12-11	18	HSA			Top 3" grass/topsoil. Greyish brown, moist, medium dense SAND, little silt, little subrounded gravel, fine-coarse grained sand, fine grained gravel, slightly plastic fines, SM, (POSSIBLE FILL)	
	S2	24/14	2.00 - 4.00	15-14-17-22	31				Greyish brown, moist, dense SAND, little silt, trace subrounded gravel, fine-coarse grained sand, fine gravel, slightly plastic fine, SM, (POSSIBLE FILL)	
5	S3	24/11	5.00 - 7.00	30-19-18-12	37		404.30		Recovered only broken cobble fragments (also in sampler tip)	GS386516 A-1-B, GM
	S4	24/NR	7.00 - 9.00	10-11-12-12	23	HSA				
10	S5	24/6	10.00 - 12.00	12-14-20-20	34				Greyish brown, moist, dense SAND, some subrounded gravel, trace silt, fine-coarse sand, fine-coarse gravel, non-plastic to slightly plastic fines, SW-SM, (TILL)	
15	S6	24/6	15.00 - 17.00	9-12-14-16	26	HSA			Light brownish grey, moist, medium dense, silty SAND, some gravel, fine-coarse grained sand, fine-coarse grained gravel, slightly plastic fines, SM (TILL)	
20	S7	24/14	20.00 - 22.00	19-21-32-49	63				Greyish brown, moist, wet, very dense, silty SAND, little subangular to subrounded gravel, fine-coarse sand, fine-coarse gravel, slightly plastic fines, SM (TILL)	GS386517 A-4, SM
24	S8	0/0	24.00 - 24.00	N/A					Bottom of Exploration at 24.0 feet below ground surface. Split spoon bouncing on possible bedrock at 24 feet.	
<small>           Remarks: Water level measured at 22 feet B.G.S. on 7/27/16 following auger refusal at 24 feet.         </small>										
<small>           Stratification lines represent approximate boundaries between soil types; transitions may be gradual.         </small>										Page 1 of 1
<small>           * Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.         </small>										Boring No.: RW-CAR-102

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

18984.00

WIN  
18984.00

BRIDGE NO. 0181

BRIDGE PLANS

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CARIBOU STREAM BRIDGE  
CARIBOU STREAM  
CARIBOU AROOSTOOK COUNTY

BORING LOGS

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SHEET NUMBER

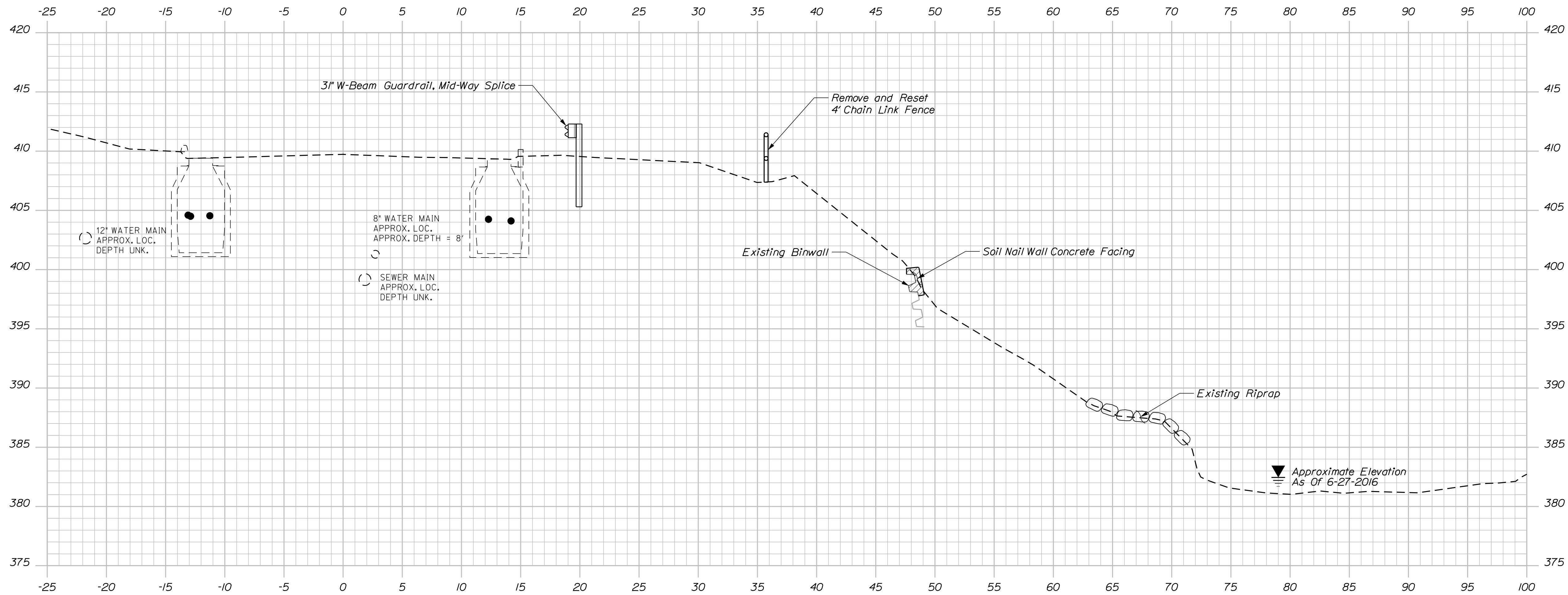
5

OF 10

PROJ. MANAGER	DATE	BY	DATE
M. GRAY	JUNE 2023	R. MAYER	

DESIGN-DETAILED	CHECKED-REVIEWED	DESIGNS-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES

SIGNATURE	P.E. NUMBER	DATE



1+50.00

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
18984.00

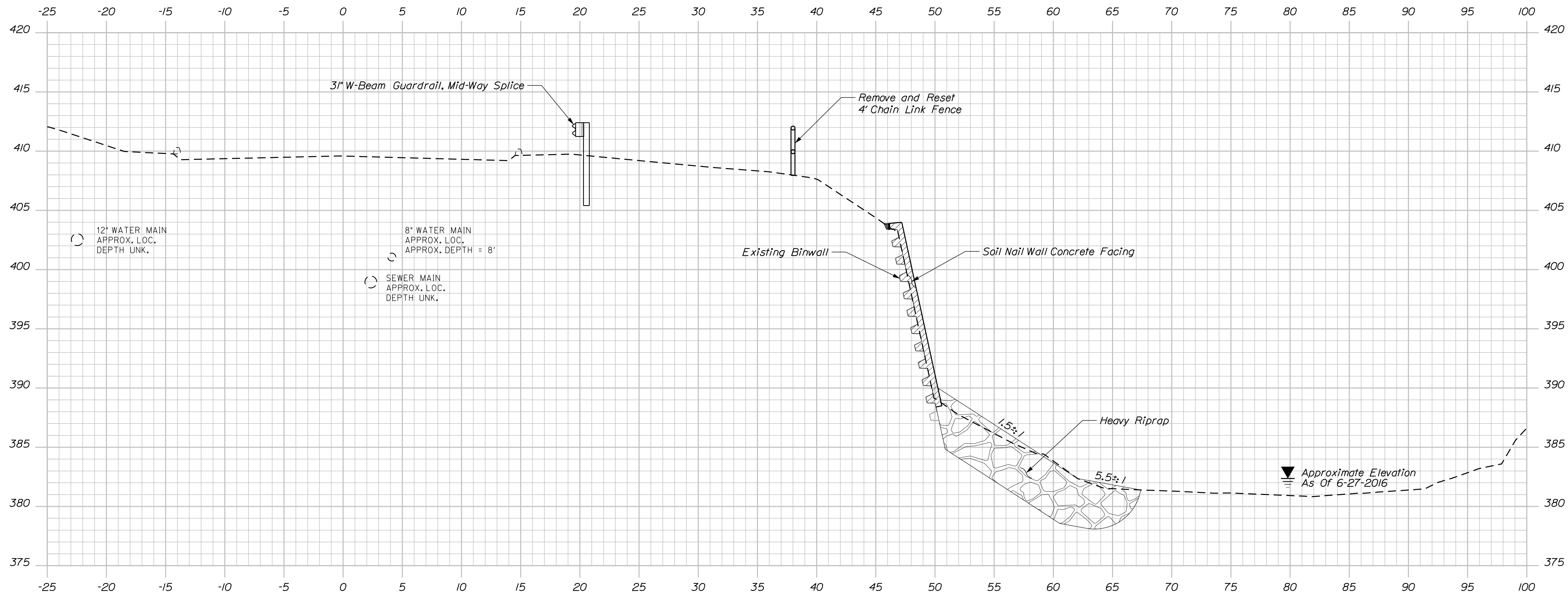
SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MGR	DATE
M. GRAY	JUNE 2023
R. MAYER	

CARIBOU STREAM BRIDGE  
CARIBOU STREAM  
CARIBOU AROOSTOOK COUNTY  
CROSS SECTIONS

SHEET NUMBER  
**6**  
OF 10

BRIDGE NO. 0181  
WIN  
18984.00  
BRIDGE PLANS



1+75.00

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

18984.00

BRIDGE NO. 0181 WIN 18984.00 BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MGR. M. GRAY  
CHECKED-REVIEWED  
DESIGNED-DETAILED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

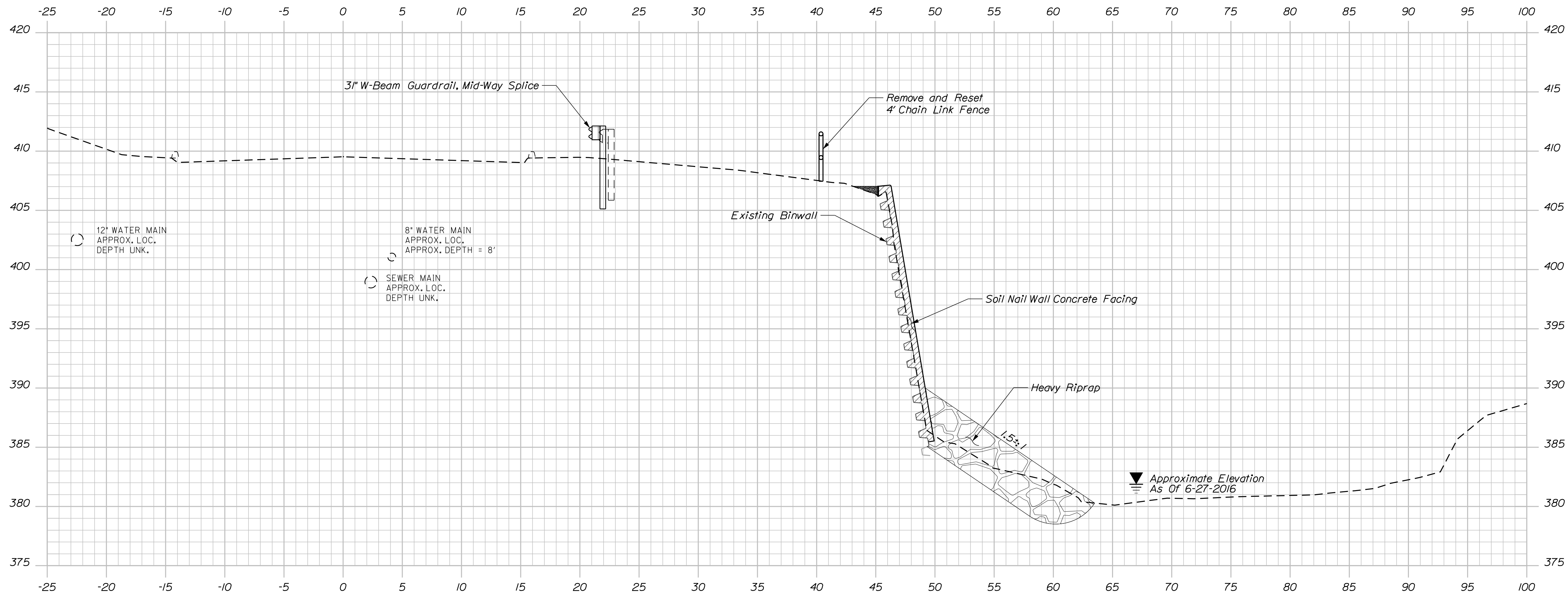
CARIBOU STREAM BRIDGE  
CARIBOU STREAM  
CARIBOU AROOSTOOK COUNTY

CROSS SECTIONS

SHEET NUMBER

2

OF 10



2+00.00

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

18984.00

BRIDGE NO. 0181 WIN 18984.00 BRIDGE PLANS

SIGNATURE

DATE  
JUNE 2023

BY  
R. MAYER

MIKE WIGHT  
M. GRAY

PROJ. MANAGER  
CHECKED-REVIEWED  
DESIGN-REVIEWED  
DESIGN-REVIEWED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

P.E. NUMBER

DATE

CARIBOU STREAM BRIDGE  
CARIBOU STREAM  
CARIBOU AROOSTOOK COUNTY

SHEET NUMBER

8

OF 10

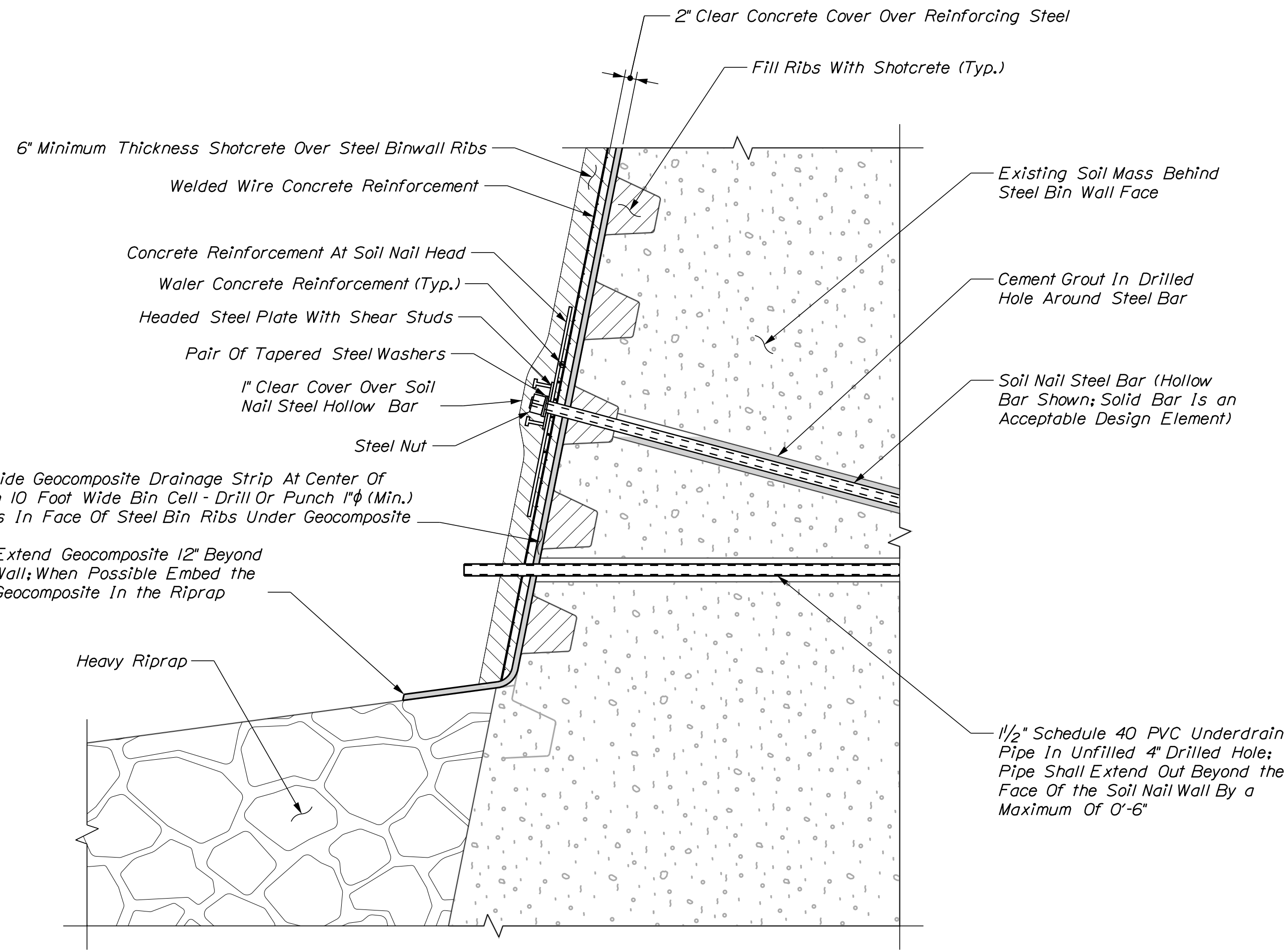
CROSS SECTIONS

Date: 6/26/2023

Username: Richard.Mayer

Division: BRIDGE

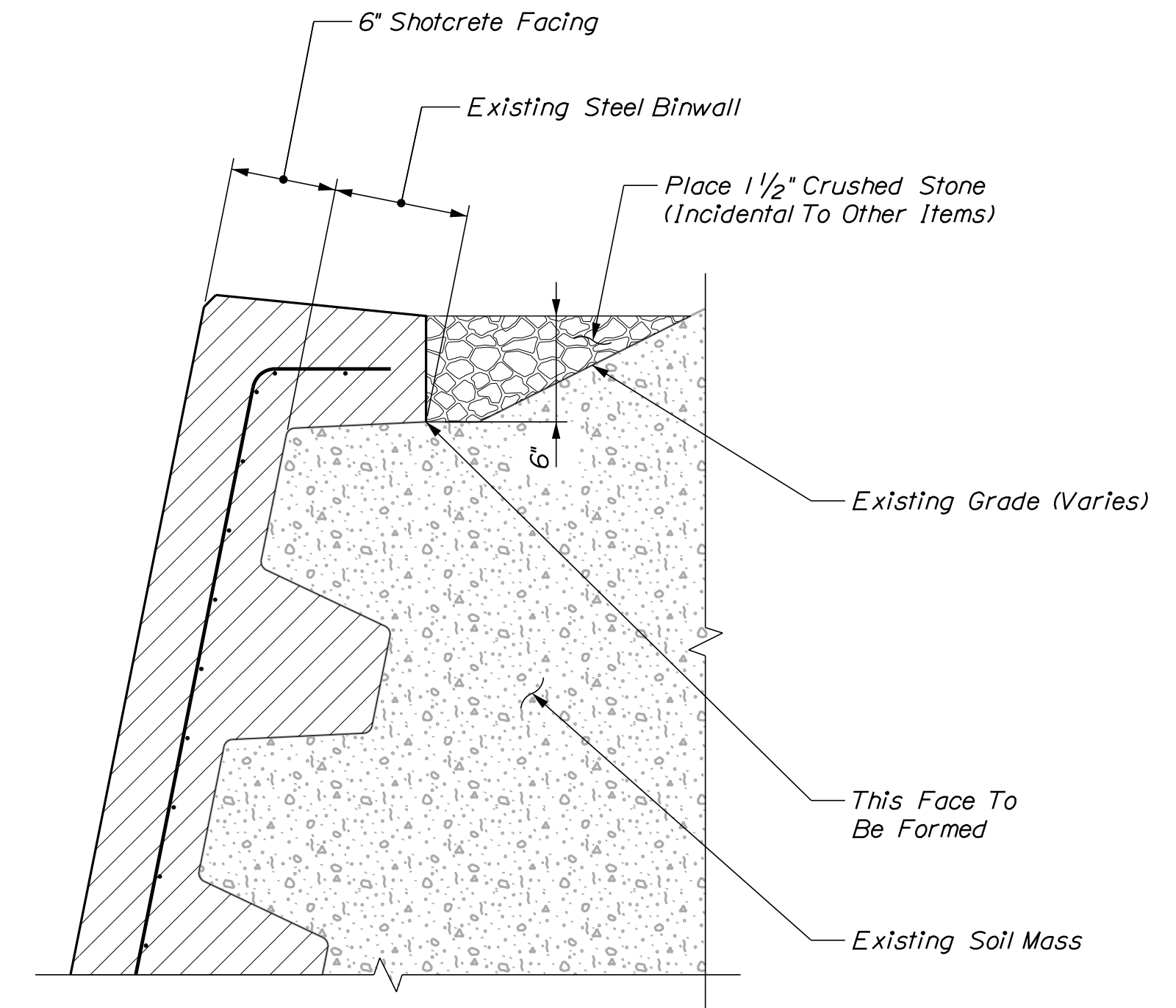
Filename: ... \MSTA\009\_WallDetails.dgn



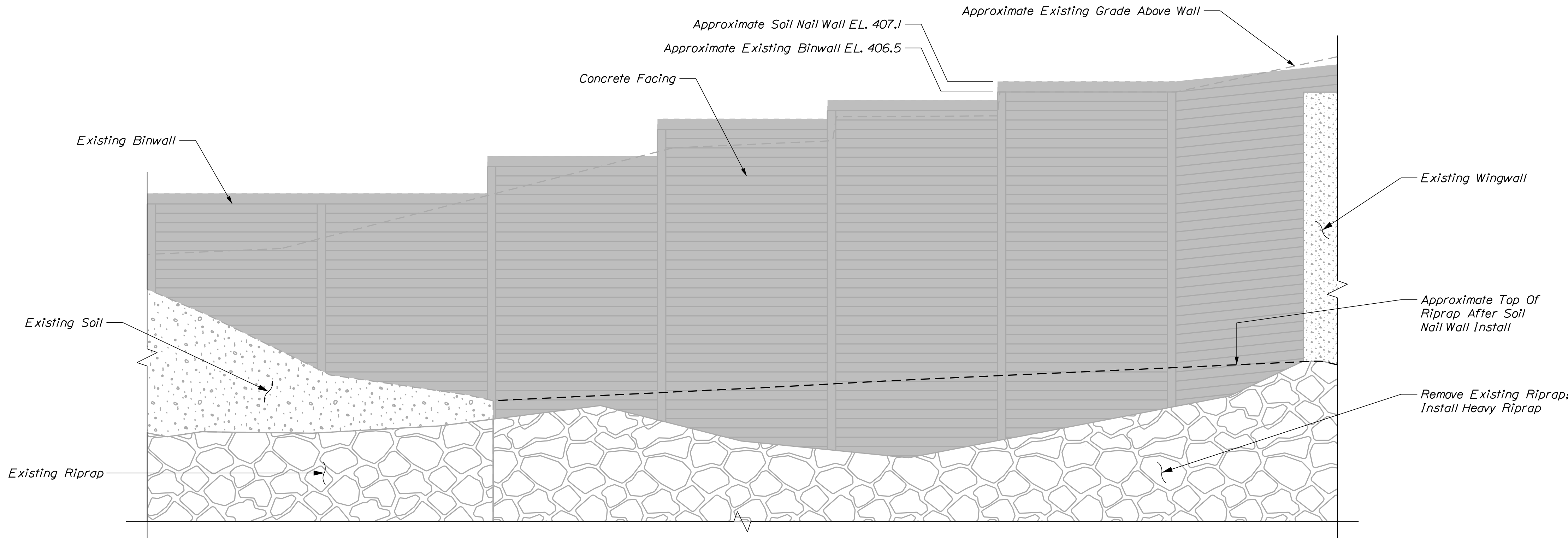
**SOIL NAIL WALL  
TYPICAL SECTION**

**CONCEPTUAL CONSTRUCTION SEQUENCE:**

1. Remove Fence
2. Clear Trees
3. Install Temporary Erosion Control Measures
4. Install Soil Nails
5. Install Shotcrete Facing
6. Excavate in Front of Binwall
7. Install Riprap
8. Restore Ground Surfaces
9. Install Guardrail and Fence



**WINGWALL CAP DETAIL**



**BINWALL ELEVATION**



**BINWALL NOTES**

1. Existing steel binwalls have an asbestos lining. Coordinate with Asbestos Management Plan for modifications to the steel wall face including required holes.
2. Pound all ragged steel edges of bin wall flush with the wall face. Remove all vegetation from wall face. This work shall be considered incidental to Item 6.36.411 Soil Nail Wall.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

18984.00

WIN

BRIDGE NO. 0181

BRIDGE PLANS

DATE  
JUNE 2023

BY  
R. MAYER

DATE  
JUNE 2023

DATE  
JUNE 2023

DATE  
JUNE 2023

DATE  
JUNE 2023

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DATE  
JUNE 2023

DATE  
JUNE 2023

SHEET NUMBER

9

OF 10

CARIBOU STREAM BRIDGE  
CARIBOU STREAM  
AROOSTOOK COUNTY

BINWALL DETAILS

Town, County, State \_\_\_\_\_  
 Approx. Property Lines \_\_\_\_\_ P.L.  
 Existing Right of Way \_\_\_\_\_  
 Limits of Wrought Portion \_\_\_\_\_ L.O.W.P.  
 Control Of Access \_\_\_\_\_ C.O.A.  
 New Right of Way \_\_\_\_\_  
 New Easement \_\_\_\_\_  
 New Temporary Rights \_\_\_\_\_  
 New R/W Within Existing R/W \_\_\_\_\_

New R/W Along Existing R/W \_\_\_\_\_  
 Building \_\_\_\_\_  
 Trees Conifer \_\_\_\_\_  
 Tree Line \_\_\_\_\_  
 Water Edge \_\_\_\_\_  
 Ledge \_\_\_\_\_  
 Fence CHAIN LINK \_\_\_\_\_  
 Sign \_\_\_\_\_  
 Clearing Limit Line \_\_\_\_\_  
 Deciduous \_\_\_\_\_  
 Bush Line \_\_\_\_\_  
 Rock/Boulder \_\_\_\_\_  
 Flag Pole \_\_\_\_\_  
 BARB WIRE \_\_\_\_\_  
 STOCKADE \_\_\_\_\_  
 WELL \_\_\_\_\_  
 Mailbox \_\_\_\_\_

**PLAN LEGEND**

Sanitary Sewer	Existing	Proposed
Telephone Line	Existing	Proposed
Electric Line	Existing	Proposed
Water Line	Existing	Proposed
Underdrain Line	Existing	Proposed
Gas Line	Existing	Proposed
Guardrail	Existing	Proposed
Culvert	Existing	Proposed

Traveled Way	Existing	Proposed
Ditch	Existing	Proposed
Catch Basin	Existing	Proposed
Manhole	Existing	Proposed
Sewer Manhole	Existing	Proposed
Utility Pole	Existing	Proposed
Fire Hydrant	Existing	Proposed
Curbing	Existing	Proposed

Cut Line	Fill Line
Stonewall	Retaining Wall
Baseline	Monument
Iron Rod Found	Replacement Pin Set
	Traverse Point
	Pipe Found

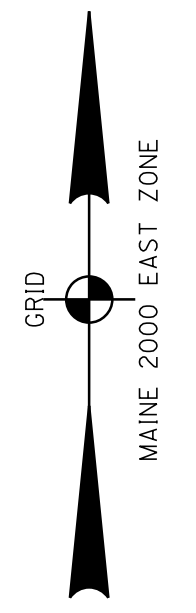
STATE OF MAINE  
 REGISTRY OF DEEDS

COUNTY \_\_\_\_\_  
 RECEIVED \_\_\_\_\_, 20\_\_\_\_  
 at \_\_\_\_\_ h \_\_\_\_\_ m \_\_\_\_\_ M and recorded in  
 Plan Book \_\_\_\_\_, Page \_\_\_\_\_  
 Attest: \_\_\_\_\_ REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100  
 Scale of Feet

**CONTROL INFORMATION**  
 HORIZONTAL DATUM - U.S. STATE PLANE NAD83 (1996)  
 ZONE - MAINE 2000 EAST  
 VERTICAL DATUM - NAVD 88  
 COMBINED FACTOR - 0.9999653

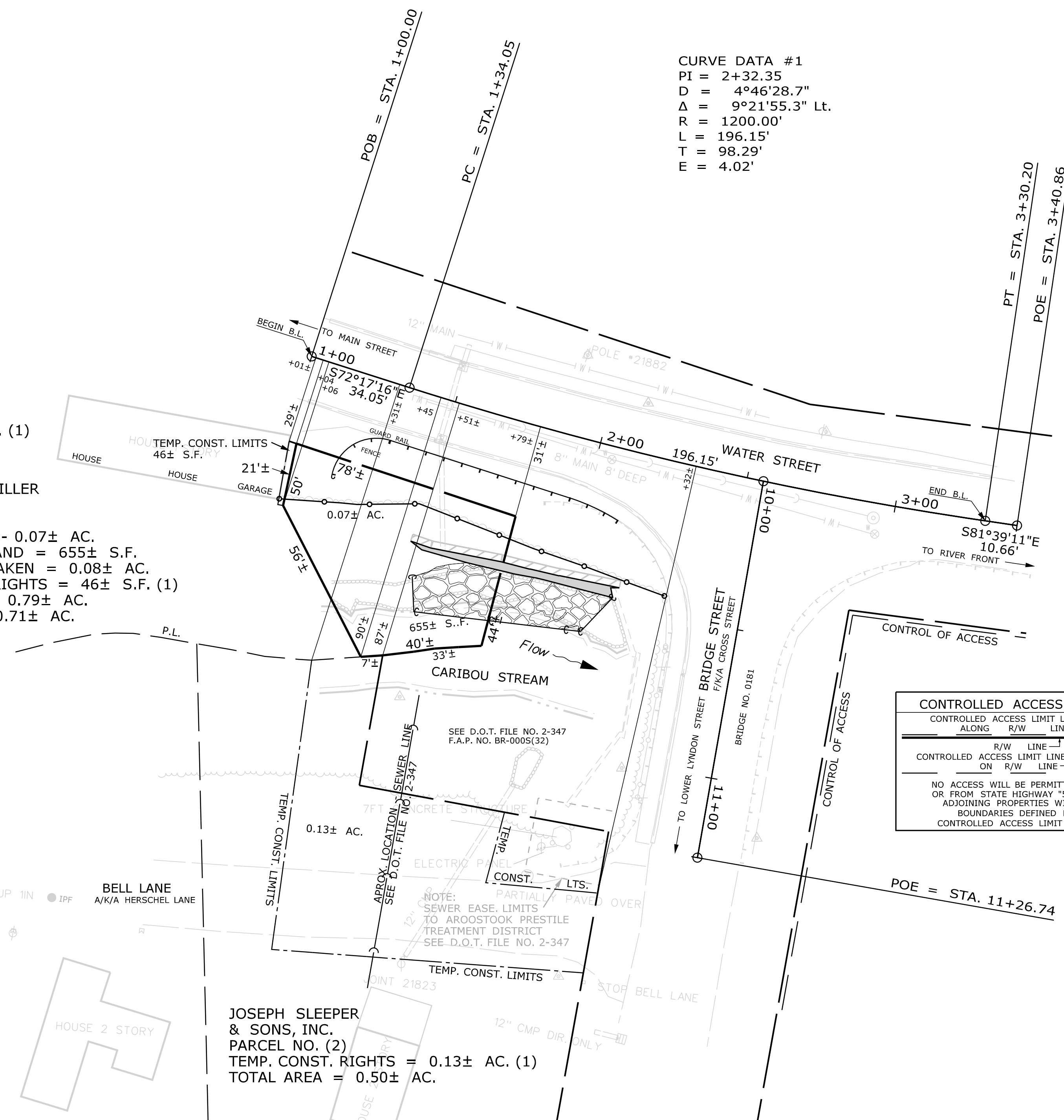


PHILIP EZRA MILLER  
 SUSAN MILLER  
 PARCEL NO. (3)  
 TEMP. CONST. RIGHTS = 46± S.F. (1)  
 TOTAL AREA = 0.71± AC.

PHILIP EZRA MILLER  
 SUSAN MILLER  
 PARCEL NO. (1)  
 UPLAND LAND - 0.07± AC.  
 SUBMERGED LAND = 655± S.F.  
 TOTAL LAND TAKEN = 0.08± AC.  
 TEMP. CONST. RIGHTS = 46± S.F. (1)  
 TOTAL AREA = 0.79± AC.  
 REM. AREA = 0.71± AC.

JOSEPH SLEEPER & SONS, INC.  
 PARCEL NO. (2)  
 TEMP. CONST. RIGHTS = 0.13± AC. (1)  
 TOTAL AREA = 0.50± AC.

**CURVE DATA #1**  
 PI = 2+32.35  
 D = 4°46'28.7"  
 Δ = 9°21'55.3" Lt.  
 R = 1200.00'  
 L = 196.15'  
 T = 98.29'  
 E = 4.02'



**CONTROLLED ACCESS LIMIT**

CONTROLLED ACCESS LIMIT LINE  
 ALONG R/W LINE

R/W LINE  
 CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE

NO ACCESS WILL BE PERMITTED TO OR FROM STATE HIGHWAY \*50\* AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

**EXISTING RIGHT OF WAY REFERENCES**  
 A) S.H.C. FILE NO. 2-202, SHEET 14 OF 30  
 B) D.O.T. FILE NO. 2-347

BRIDGE NO. 0181 WIN 018984.00

CARIBOU STREAM BRIDGE OVER CARIBOU STREAM

REVISIONS			PLAN FILED IN PLAN BOOK			PAGE COUNTY RECORD (SOUTH)		
NO.	DATE	DESCRIPTION	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	307
1	11/20/2022	ADDED PARCEL NOS. 2 & 3			COND.	10/10/17	5709	307

DAVID BERNHARDT  
 COMMISSIONER  
 JOYCE NOEL TAYLOR  
 CHIEF ENGINEER

DATE \_\_\_\_\_



To the best of my knowledge and belief the Highway Right of Way lines depicted hereon are based upon a survey conforming to the Standards of Practice promulgated by the Maine Board of Licensure for Professional Land Surveyors 02-360 CMR, Chapter 90; Exceptions: (1) No separate survey report, (2) Monumentation only as shown on plan. See sheet 2 of this plan set for coordinates. (3) Other boundary lines, including lines between abutters are approximate and for general reference purposes only.

WATER STREET  
 TOWNWAY

CARIBOU AROOSTOOK COUNTY  
 STATE PROJECT NO. 18984.00

JULY 2017  
 SCALE 1" = 25'

RIGHT-OF-WAY MAP  
 SHEET 1 OF 1

D.O.T. FILE NO. 2-594

SHEET NUMBER  
**10**  
 OF 10

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	T.L.B.	
FINAL RIGHT OF WAY	T.L.B.	G.L.L.
AREAS	G.L.L.	D.S.G.

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460

CARIBOU  
 RIGHT OF WAY MAP

Date: 6/23/2023

Username: Richard.Mayer

Division: BRIDGE

Filename: ... \00\ROW\MSTA001\_RWPLAN1.dgn

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



**SPECIFICATIONS**

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

**DESIGN LOADING**

Live Load ..... HL - 93 Modified for Strength I

**TRAFFIC DATA**

Current (2020) AADT .....	2650
Future (2040) AADT .....	3180
DHV - % of AADT .....	10
Design Hour Volume .....	318
Heavy Trucks (% of AADT) .....	21
Heavy Trucks (% of DHV) .....	17
Directional Distribution (% of DHV) .....	52
18 kip Equivalent P 2.0 .....	893
18 kip Equivalent P 2.5 .....	850
Design Speed (mph) .....	35

**MATERIALS**

Concrete: Unless Noted Otherwise .....	Class "A"
Reinforcing Steel .....	ASTM A 615/A 615M, Grade 60
Shotcrete .....	See Special Provision
Structural Steel .....	ASTM A36

**BASIC DESIGN STRESSES**

Concrete .....	$f'c = 4,000$ psi
Reinforcing Steel .....	$f_y = 60,000$ psi
Shotcrete .....	See Special Provision
Structural Steel, ASTM A36 .....	$F_y = 36,000$ psi

## THE FORKS/WEST FORKS SOMERSET COUNTY THE FORKS BRIDGE OVER KENNEBEC RIVER ROUTE 201 FEDERAL AID PROJECT NO. 2236200 PROJECT LENGTH 0.038 mi. BRIDGE NO. 2841

**LIST OF DRAWINGS**

Title Sheet .....	1
Estimated Quantities & General Construction Notes .....	2
General Plan .....	3
Abutment Details .....	4
Wingwall Elevations .....	5
Wingwall Details .....	6
FRP Bridge Drain Insert .....	7
Right of Way Map .....	8

**UTILITIES**

Consolidated Communications, Central Maine Power

**MAINTENANCE OF TRAFFIC**

Daily lane closures as needed with flaggers.  
Guide recreational traffic in River with buoys.

<b>PROJECT LOCATION</b>	The Forks Bridge (#2841) over the Upper Kennebec River. Located 0.03 of a mile north of Lake Moxie Road. Lat./Long. 45°20'12.1" N 69°58'5.47" W
<b>PROGRAM AREA</b>	Highway Bridges - Traditional
<b>OUTLINE OF WORK</b>	Substructure Rehabilitation, Deck Drain Replacement, Guardrail Replacement, Soil Nail Wall

WIN 22362.00

02236200

THE FORKS/WEST FORKS  
THE FORKS BRIDGE

TITLE SHEET

SHEET NUMBER  
**1**  
OF 8

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE 7/26/23

COMMISSIONER: [Signature]

CHIEF ENGINEER: [Signature]

STATE OF MAINE  
MARK GRAY  
No. 3997  
LICENSED PROFESSIONAL ENGINEER

SIGNATURE: [Signature]

P.E. NUMBER 3997

DATE 6-27-2023

PROGRAM	BRIDGE
PROJECT MANAGER	MARK PARLIN
DESIGNER	MARK GRAY
CONSULTANT	N/A
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.12	REMOVING EXISTING STRUCTURAL CONCRETE	10	CY
502.21	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	19	CY
502.78	FRP BRIDGE DRAIN INSERT	6	EA
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	1200	LB
503.13	REINFORCING STEEL, PLACING	1200	LB
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (278 SY)	1	LS
518.50	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	18	SF
527.33	TRUCK MOUNTED ATTENUATOR	1	EA
606.1301	31" W-BM GR, MID-WAY SPLICE-SGL FACED	275	LF
606.1304	31" W-BM GR, MID-WAY SPLICE-OVER 15' RAD	94	LF
606.1727	BRIDGE TRANSITION - TYPE 1A	4	EA
606.265	TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	3	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	8	EA
619.14	EROSION CONTROL MIX	5	CY
627.55	12" TEMPORARY PAVEMENT TAPE, WHITE	30	LF
627.57	12" REMOVABLE BLACK LINE MASKING TAPE	1500	LF
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
636.400	SOIL NAIL WALL DESIGN	1	LS
636.411	SOIL NAIL WALL	403	SF
636.42	VERIFICATION TEST - SOIL NAILS	3	EA
636.421	PROOF TEST - SOIL NAILS	3	EA
636.425	SOIL NAIL EQUIPMENT MOBILIZATION	1	LS
639.19	FIELD OFFICE TYPE B	1	EA
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	60	EA
652.34	CONE	20	EA
652.3401	BUOY ASSEMBLY	5	EA
652.35	CONSTRUCTION SIGNS	150	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (60 CD)	1	LS
652.38	FLAGGER	240	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

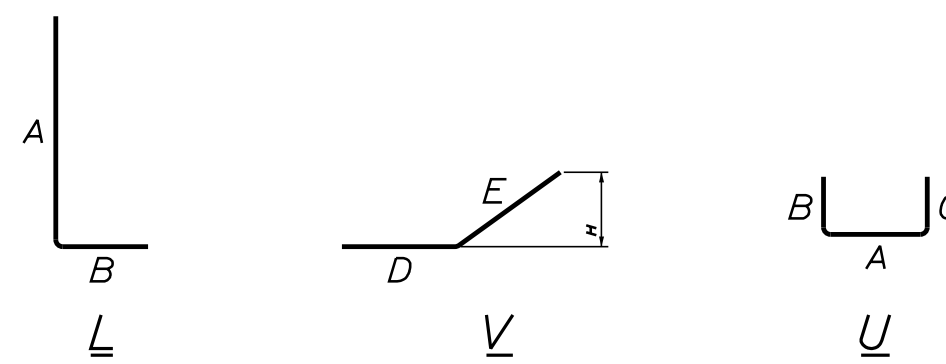
REINFORCEMENT BAR SCHEDULE

STRAIGHT BARS				BENT BARS										
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	H	LOCATION
Abutment No. 1 & No. 2 Ends				Abutment No. 1 & No. 2 Ends										
A400	28	8'-1 1/2"	Abutment Ends	A450	45	2'-4 1/2"	L	1'-0 3/4"	1'-3 3/4"					Abutment Ends
A401	4	7'-1"	Abutment Ends	A451	4	9'-1 1/2"	V				5'-9"	3'-4 1/2"	2'-7 1/2"	Abutment Ends
A402	8	6'-3 1/2"	Abutment Ends											
A403	8	6'-1"	Abutment Ends											
				Wingwalls										
A404	6	5'-11"	Abutment Ends	W550	26	5'-2"	U	1'-8"	1'-9"	1'-9"				Wingwall Caps
A405	6	5'-7 1/2"	Abutment Ends	W551	17	5'-5"	U	1'-11"	1'-9"	1'-9"				Wingwall Caps
A406	4	5'-4"	Abutment Ends											
A407	14	15'-5"	Abutment Ends											
A408	7	16'-4"	Abutment Ends											
A409	7	10'-5"	Abutment Ends											
				Wingwalls										
W400	26	1'-10"	Wingwall Cap											
W401	17	2'-1"	Wingwall Cap											
W500	2	21'-6"	Wingwall Cap											
W501	2	22'-6"	Wingwall Cap											
W502	2	12'-6"	Wingwall Cap											
W503	2	13'-0"	Wingwall Cap											
W504	2	18'-6"	Wingwall Cap											
W505	2	19'-6"	Wingwall Cap											
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	H	LOCATION

GENERAL NOTES

- The first two digits following the letter(s) of the mark indicate the size of the bar:  
 Mark "A502" = bar size #5  
 Mark "P805" = bar size #8  
 Mark "S650" = bar size #6
- All dimensions are out-to-out of bar.
- Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.
- Reinforcing Bar: ASTM A 615/A 615M, Grade 60

TYPE - BENDING DIAGRAMS



GENERAL CONSTRUCTION NOTES

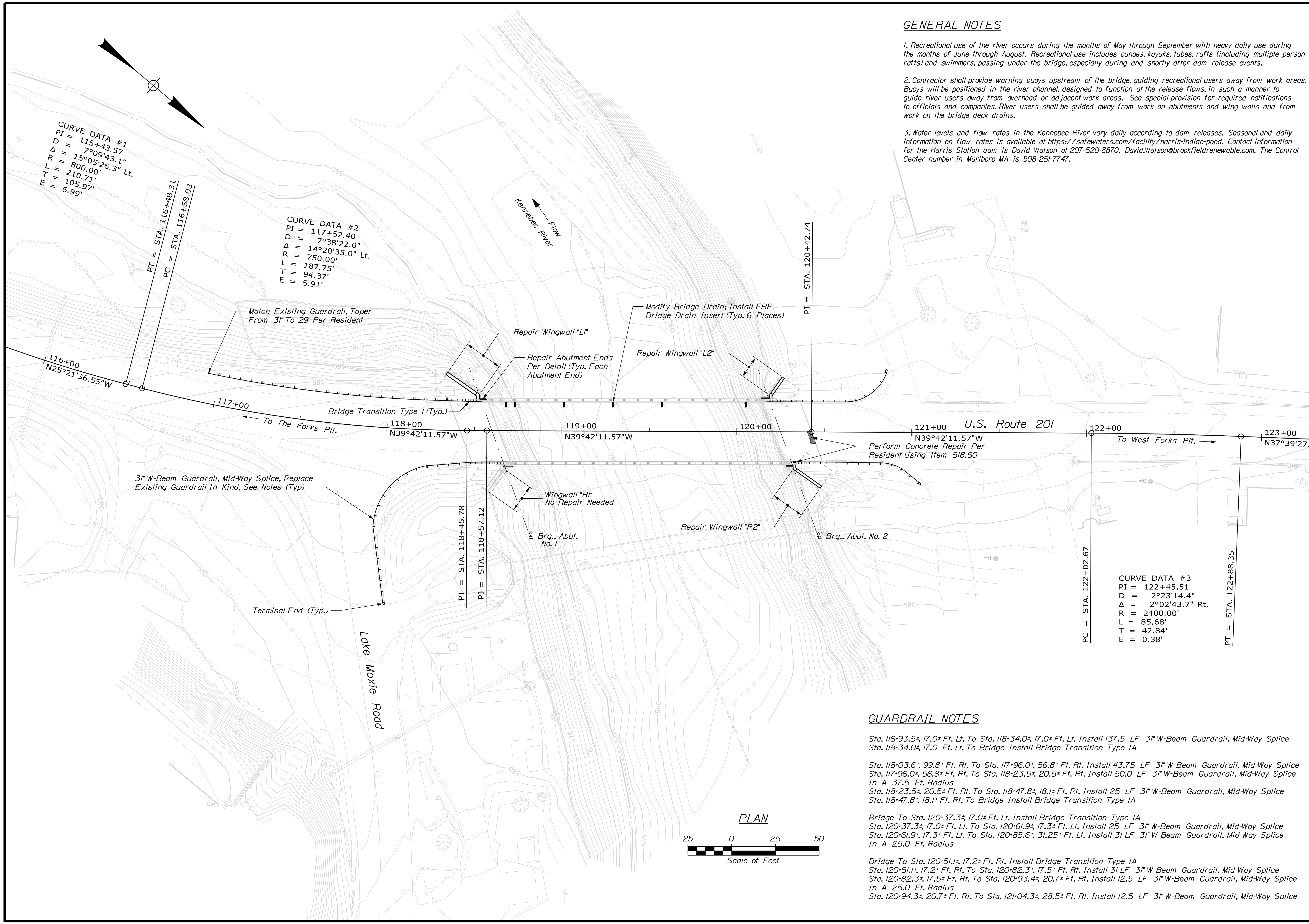
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:  
 All exposed surfaces of concrete including Fascias, Concrete barrier railing, Abutment walls and Wingwalls, Shotcrete Soil Nail Wall Facing
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
  - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
  - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
  - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.
- Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- Soil nail walls to be designed by the Contractor. See Special Provision.
- The project geotechnical report titled: Geotechnical Data Report for the Rehabilitation of The Forks Bridge, Route 201 over Kennebec River, The Forks Plantation-West Forks Plantation, Maine, Soils Report 2023-10, May 26, 2023, may be accessed at the MaineDOT web address.
- Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.
- Payment for equipment, labor and materials to access the work, as well as re-establish original ground, will be considered incidental to related Contract items. Clearing of vegetation shall be incidental to related Contract items.
- For easements, construction limits and right-of-way lines refer to Right Of Way Map.
- Existing signs within the project limits shall be removed and reset as directed by the Resident. Payment for removal and restoration of existing signs shall be incidental to the Contract. No separate payment will be made.
- Overspray of shotcrete onto adjacent surfaces shall be removed at the Contractor's expense.

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 022362.00  
 WIN  
 22362.00  
 BRIDGE NO. 2841  
 BRIDGE PLANS

DATE: JUNE 2023  
 BY: R. MAYER  
 M. PARLIN  
 M. GRAY  
 DESIGN-DETAILED  
 CHECKED-REVIEWED  
 DESIGNS-DETAILED  
 DESIGNS-DETAILED  
 REVISIONS 1  
 REVISIONS 2  
 REVISIONS 3  
 REVISIONS 4  
 FIELD CHANGES

THE FORKS BRIDGE  
 KENNEBEC RIVER  
 THE FORKS WEST FORKS SOMERSET COUNTY  
 ESTIMATED QUANTITIES &  
 GENERAL CONSTRUCTION NOTES

SHEET NUMBER  
 2  
 OF 8

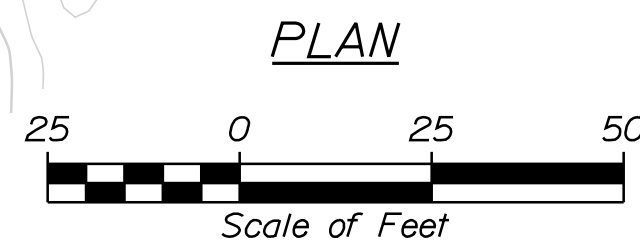


**GENERAL NOTES**

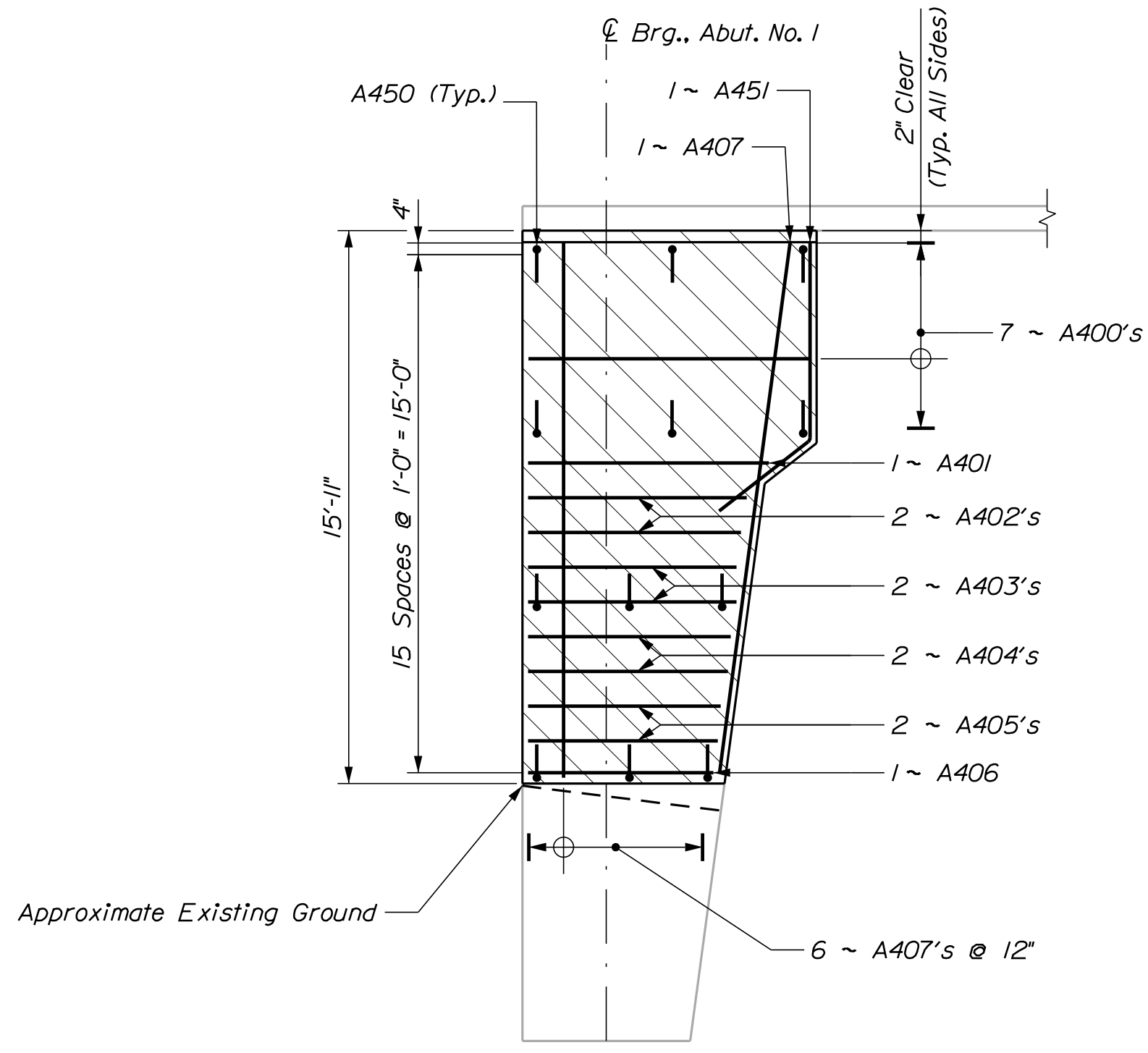
1. Recreational use of the river occurs during the months of May through September with heavy daily use during the months of June through August. Recreational use includes canoes, kayaks, tubes, rafts (including multiple person rafts) and swimmers, passing under the bridge, especially during and shortly after dam release events.
2. Contractor shall provide warning buoys upstream of the bridge, guiding recreational users away from work areas. Buoys will be positioned in the river channel, designed to function at the release flows, in such a manner to guide river users away from overhead or adjacent work areas. See special provision for required notifications to officials and companies. River users shall be guided away from work on abutments and wing walls and from work on the bridge deck drains.
3. Water levels and flow rates in the Kennebec River vary daily according to dam releases. Seasonal and daily information on flow rates is available at <https://safewaters.com/facility/harris-indian-pond>. Contact information for the Harris Station dam is David Watson at 207-520-8870, David.Watson@brookfieldrenewable.com. The Control Center number in Marlboro MA is 508-251-7747.

**GUARDRAIL NOTES**

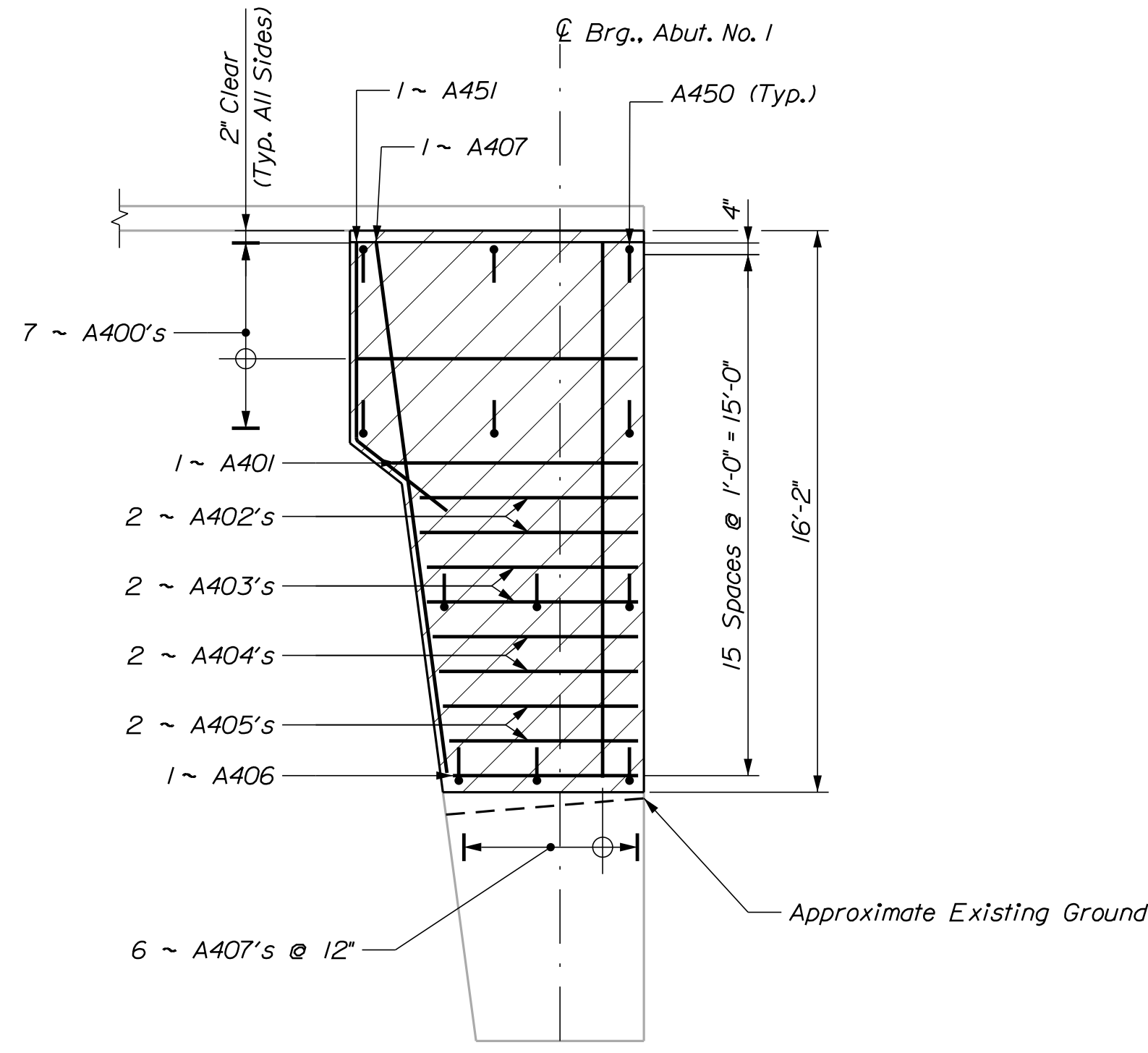
- Sta. 116+93.5±, 17.0± Ft. Lt. To Sta. 118+34.0±, 17.0± Ft. Lt. Install 137.5 LF 3" W-Beam Guardrail, Mid-Way Splice
- Sta. 118+34.0±, 17.0 Ft. Lt. To Bridge Install Bridge Transition Type IA
- Sta. 118+03.6±, 99.8± Ft. Rt. To Sta. 117+96.0±, 56.8± Ft. Rt. Install 43.75 LF 3" W-Beam Guardrail, Mid-Way Splice
- Sta. 117+96.0±, 56.8± Ft. Rt. To Sta. 118+23.5±, 20.5± Ft. Rt. Install 50.0 LF 3" W-Beam Guardrail, Mid-Way Splice In A 37.5 Ft. Radius
- Sta. 118+23.5±, 20.5± Ft. Rt. To Sta. 118+47.8±, 18.1± Ft. Rt. Install 25 LF 3" W-Beam Guardrail, Mid-Way Splice
- Sta. 118+47.8±, 18.1± Ft. Rt. To Bridge Install Bridge Transition Type IA
- Bridge To Sta. 120+37.3±, 17.0± Ft. Lt. Install Bridge Transition Type IA
- Sta. 120+37.3±, 17.0± Ft. Lt. To Sta. 120+61.9±, 17.3± Ft. Lt. Install 25 LF 3" W-Beam Guardrail, Mid-Way Splice
- Sta. 120+61.9±, 17.3± Ft. Lt. To Sta. 120+85.6±, 31.25± Ft. Lt. Install 31 LF 3" W-Beam Guardrail, Mid-Way Splice In A 25.0 Ft. Radius
- Bridge To Sta. 120+51.1±, 17.2± Ft. Rt. Install Bridge Transition Type IA
- Sta. 120+51.1±, 17.2± Ft. Rt. To Sta. 120+82.3±, 17.5± Ft. Rt. Install 31 LF 3" W-Beam Guardrail, Mid-Way Splice
- Sta. 120+82.3±, 17.5± Ft. Rt. To Sta. 120+93.4±, 20.7± Ft. Rt. Install 12.5 LF 3" W-Beam Guardrail, Mid-Way Splice In A 25.0 Ft. Radius
- Sta. 120+93.4±, 20.7± Ft. Rt. To Sta. 121+04.3±, 28.5± Ft. Rt. Install 12.5 LF 3" W-Beam Guardrail, Mid-Way Splice



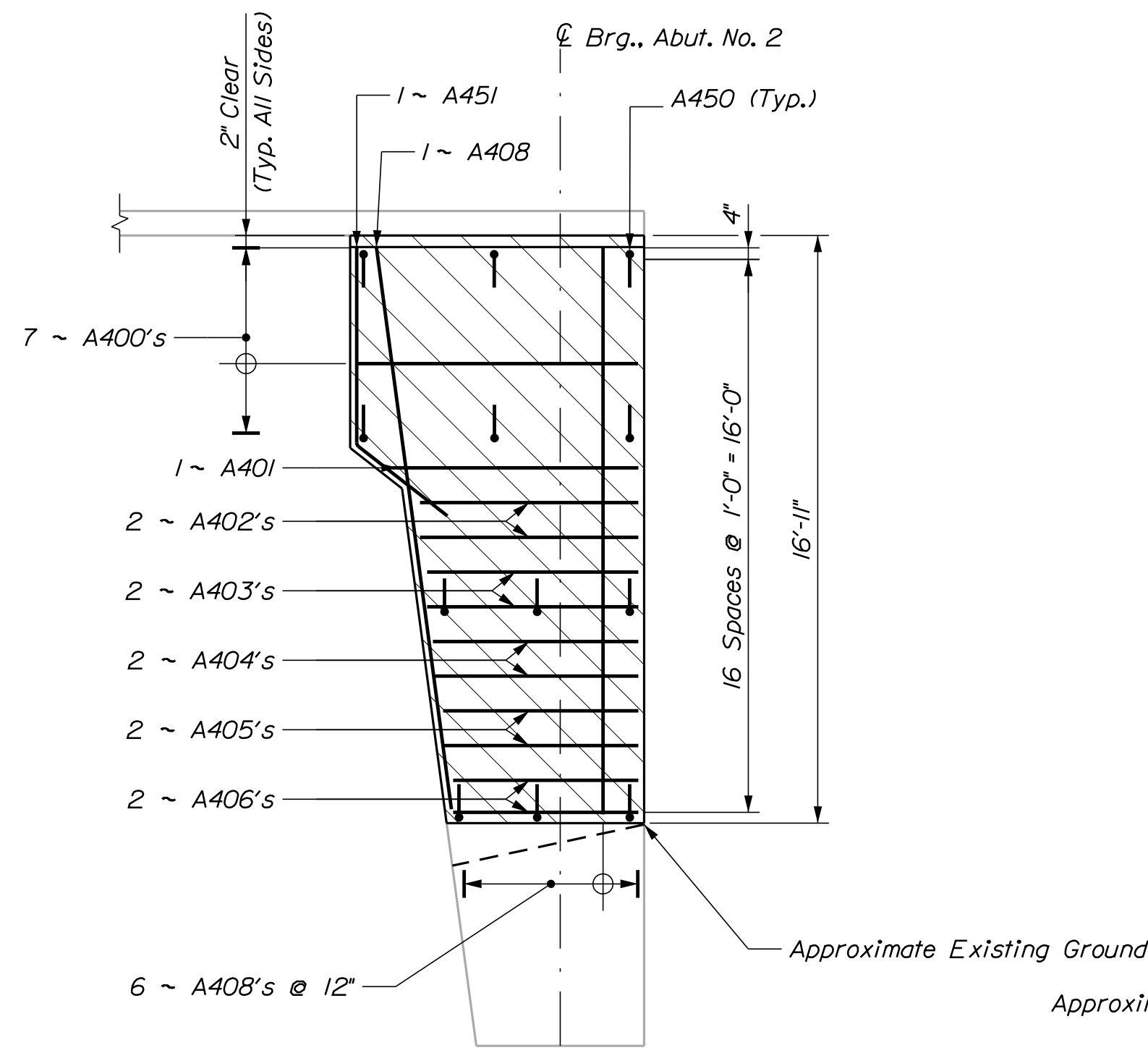
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		022362.00		WIN		22362.00		BRIDGE NO. 2841		BRIDGE PLANS	
THE FORKS BRIDGE		KENNEBEC RIVER		THE FORKS\WEST FORKS		SOMERSET COUNTY		GENERAL PLAN		SHEET NUMBER		3	
PROJ. MANAGER		M. PARLIN		BY		R. MAYER		DATE		JUNE 2023		SIGNATURE	
CHECKED/REVIEWED		M. GRAY		DESIGNED/TAILED				REVISIONS 1				P.E. NUMBER	
DESIGNED/TAILED				REVISIONS 2				REVISIONS 3				DATE	
REVISIONS 4				FIELD CHANGES									



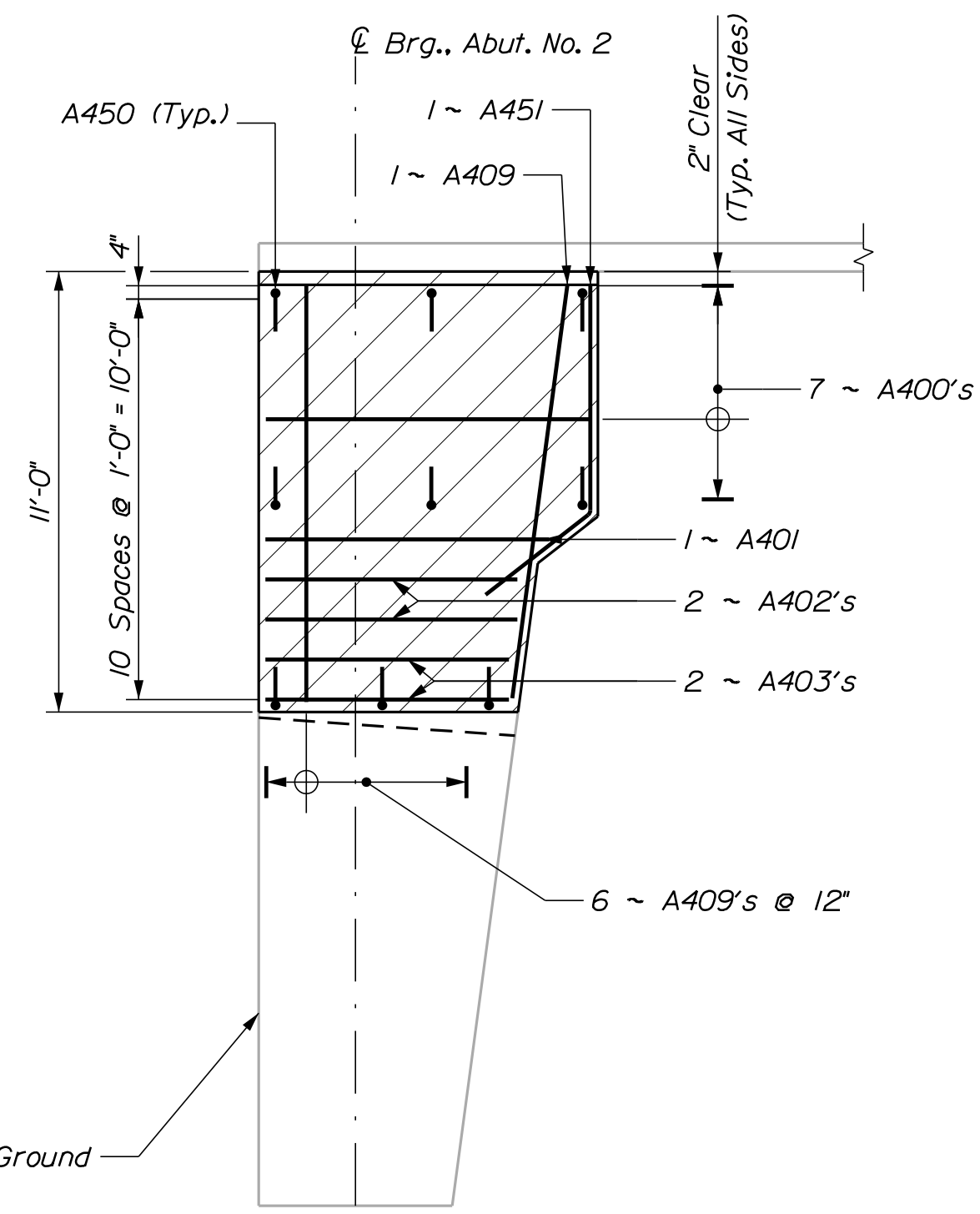
ABUTMENT NO. 1 NORTH FACE ELEVATION  
(Adjacent To Wingwall "R1")



ABUTMENT NO. 1 SOUTH FACE ELEVATION  
(Adjacent To Wingwall "L1")



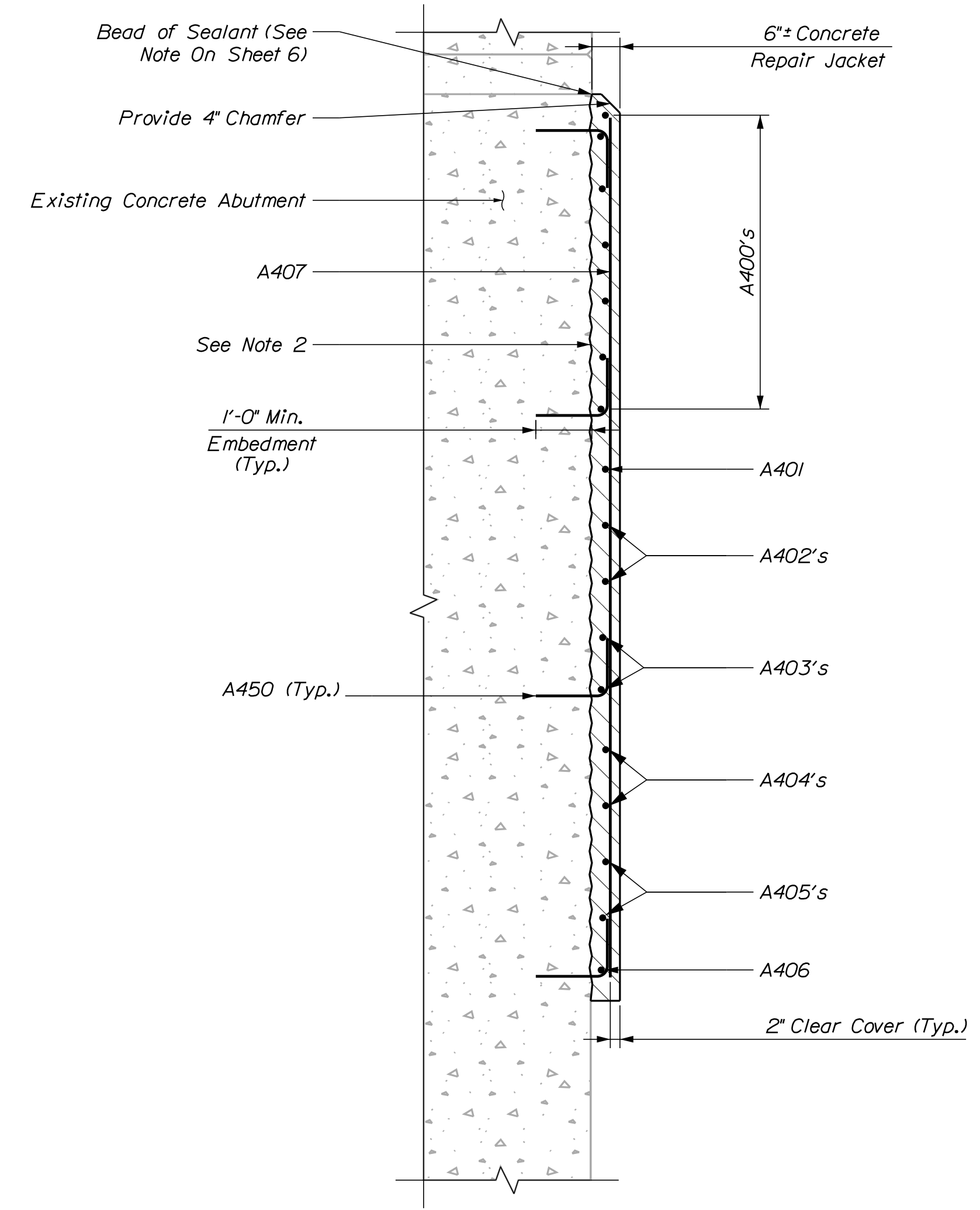
ABUTMENT NO. 2 NORTH FACE ELEVATION  
(Adjacent To Wingwall "R2")



ABUTMENT NO. 2 SOUTH FACE ELEVATION  
(Adjacent To Wingwall "L2")

**ABUTMENT NOTES**

- Shotcrete with a smooth trowelled surface may be used instead of formed concrete - exposed edges shall be formed.
- Prior to installing repair jacket Contractor shall remove loose or spalled concrete. This work to be incidental to related Contract items.



ABUTMENT REPAIR JACKET SECTION  
Abutment No. 1 South Face Shown, Others Similar

PROJ. MANAGER	BY	DATE
M. PARLIN	R. MAYER	JUNE 2023
CHECKED-REVIEWED		SIGNATURE
DESIGNS DETAILED		P.E. NUMBER
REVISIONS 1		DATE
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

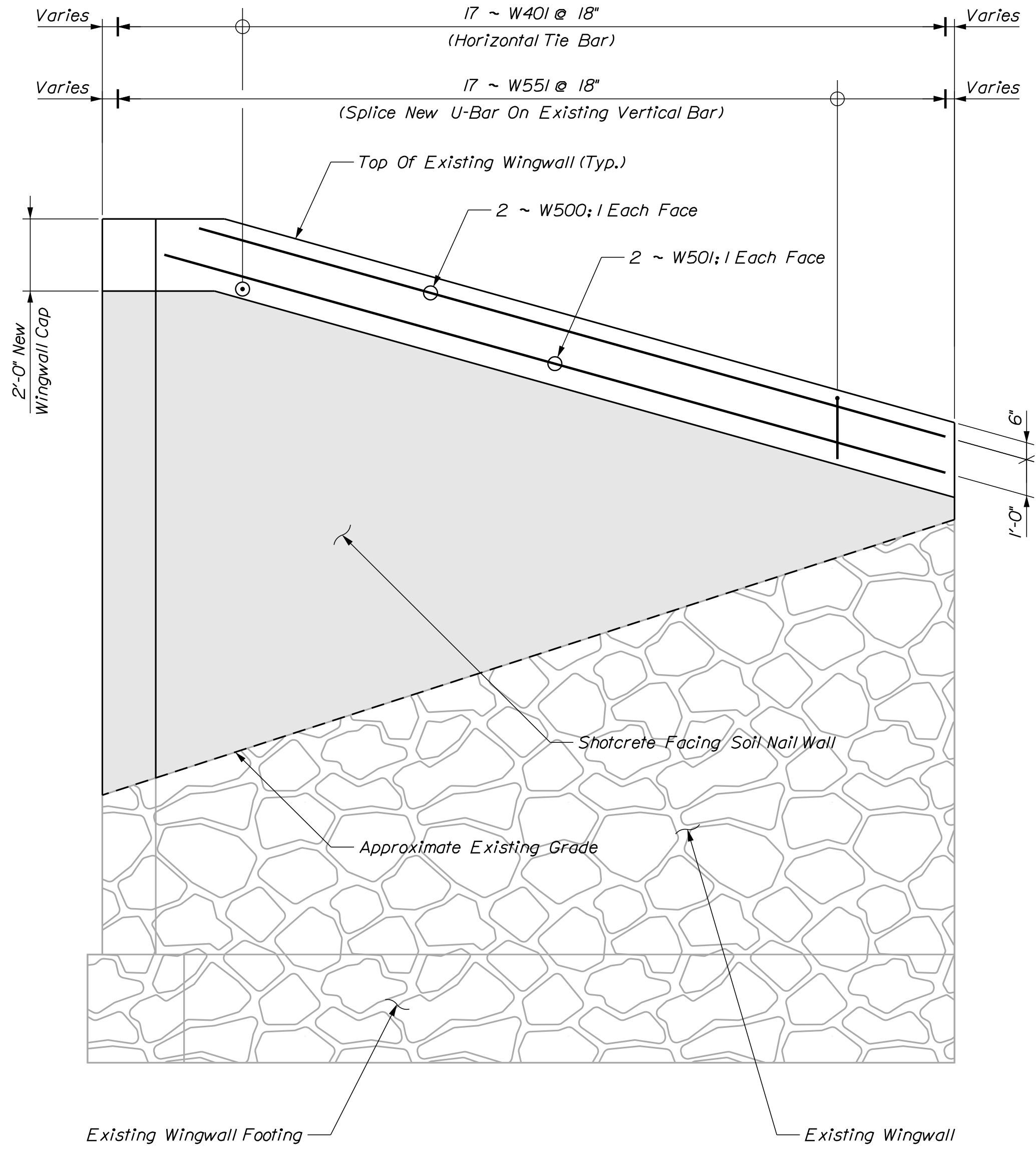
THE FORKS BRIDGE  
KENNEBEC RIVER  
THE FORKS WEST FORKS SOMERSET COUNTY

**ABUTMENT DETAILS**

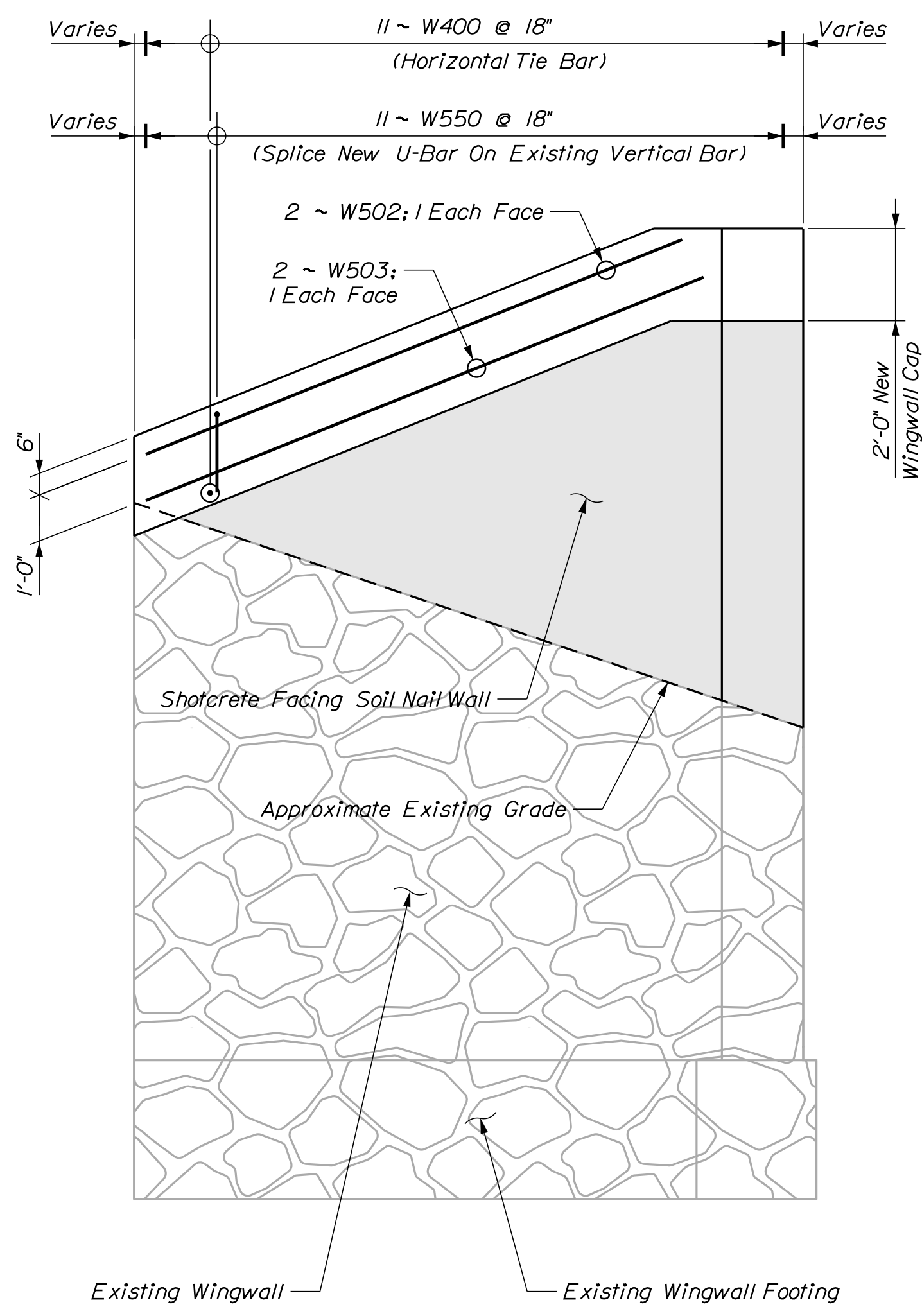
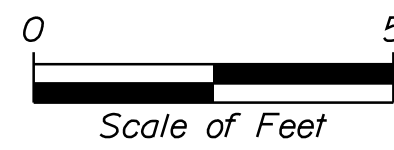
SHEET NUMBER

4

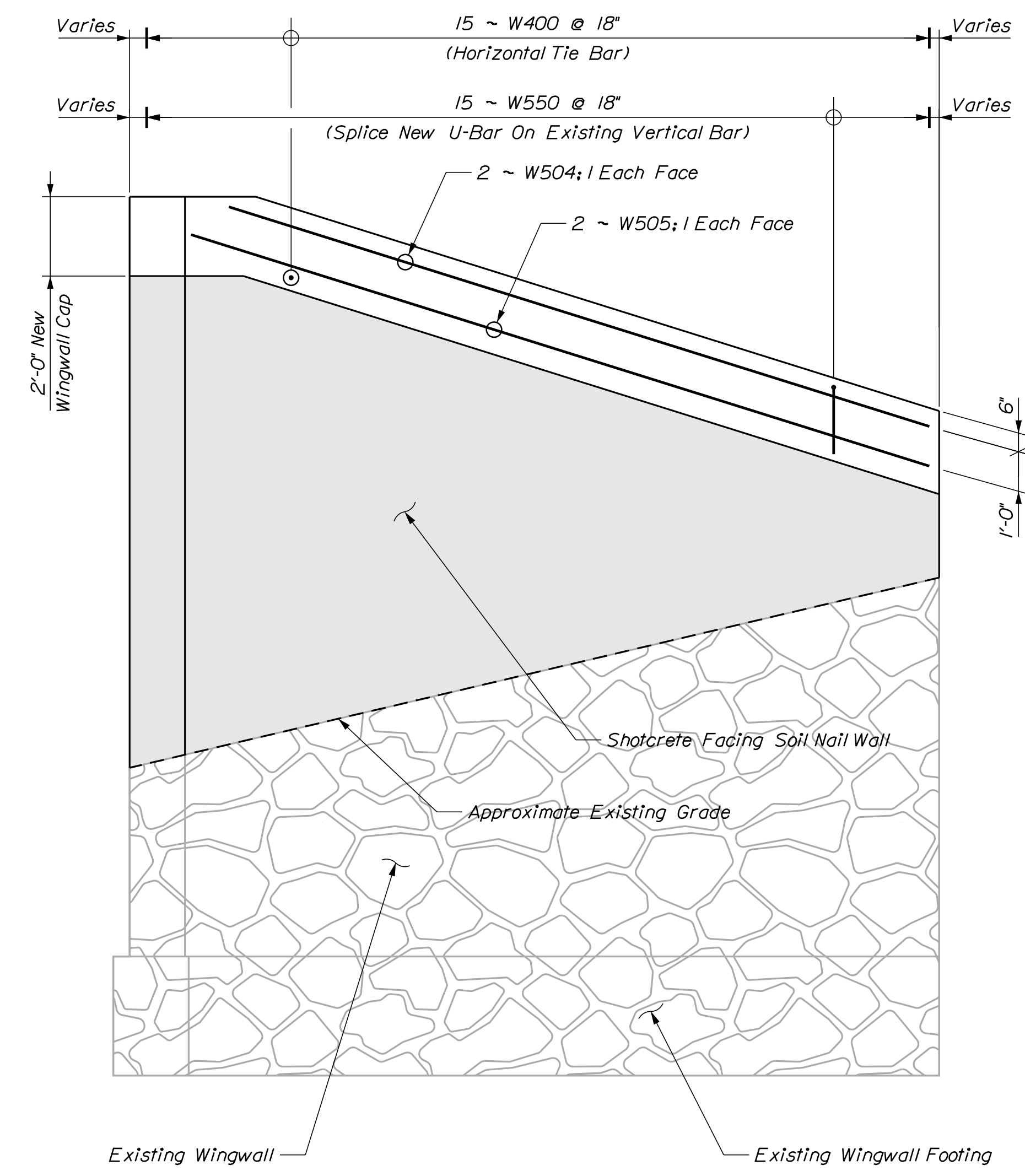
OF 8



**WINGWALL "L1" FRONT ELEVATION**  
 Pay Area Of Shotcrete At Wingwall "L1" Is 181.5± Sq. Ft.



**WINGWALL "L2" FRONT ELEVATION**  
 Pay Area Of Shotcrete At Wingwall "L2" Is 65.5± Sq. Ft.



**WINGWALL "R2" FRONT ELEVATION**  
 Pay Area Of Shotcrete At Wingwall "R2" Is 155.8± Sq. Ft.



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		022362.00	WIN 22362.00	BRIDGE NO. 2841	BRIDGE PLANS																																										
THE FORKS BRIDGE KENNEBEC RIVER THE FORKS\WEST FORKS SOMERSET COUNTY	WINGWALL ELEVATIONS	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>PROJ. MANAGER</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td>M. PARLIN</td> <td>R. MAYER</td> <td>JUNE 2023</td> </tr> <tr> <th>CHECKED/REVIEWED</th> <th>DESIGN/DETAILED</th> <th>SIGNATURE</th> </tr> <tr> <td>M. GRAY</td> <td></td> <td></td> </tr> <tr> <th>DESIGN/DETAILED</th> <th>REVISIONS 1</th> <th>P.E. NUMBER</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <th>REVISIONS 2</th> <th>DATE</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <th>REVISIONS 3</th> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <th>REVISIONS 4</th> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <th>FIELD CHANGES</th> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>				PROJ. MANAGER	BY	DATE	M. PARLIN	R. MAYER	JUNE 2023	CHECKED/REVIEWED	DESIGN/DETAILED	SIGNATURE	M. GRAY			DESIGN/DETAILED	REVISIONS 1	P.E. NUMBER					REVISIONS 2	DATE					REVISIONS 3						REVISIONS 4						FIELD CHANGES				
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		OF 8																																													

Date: 6/26/2023

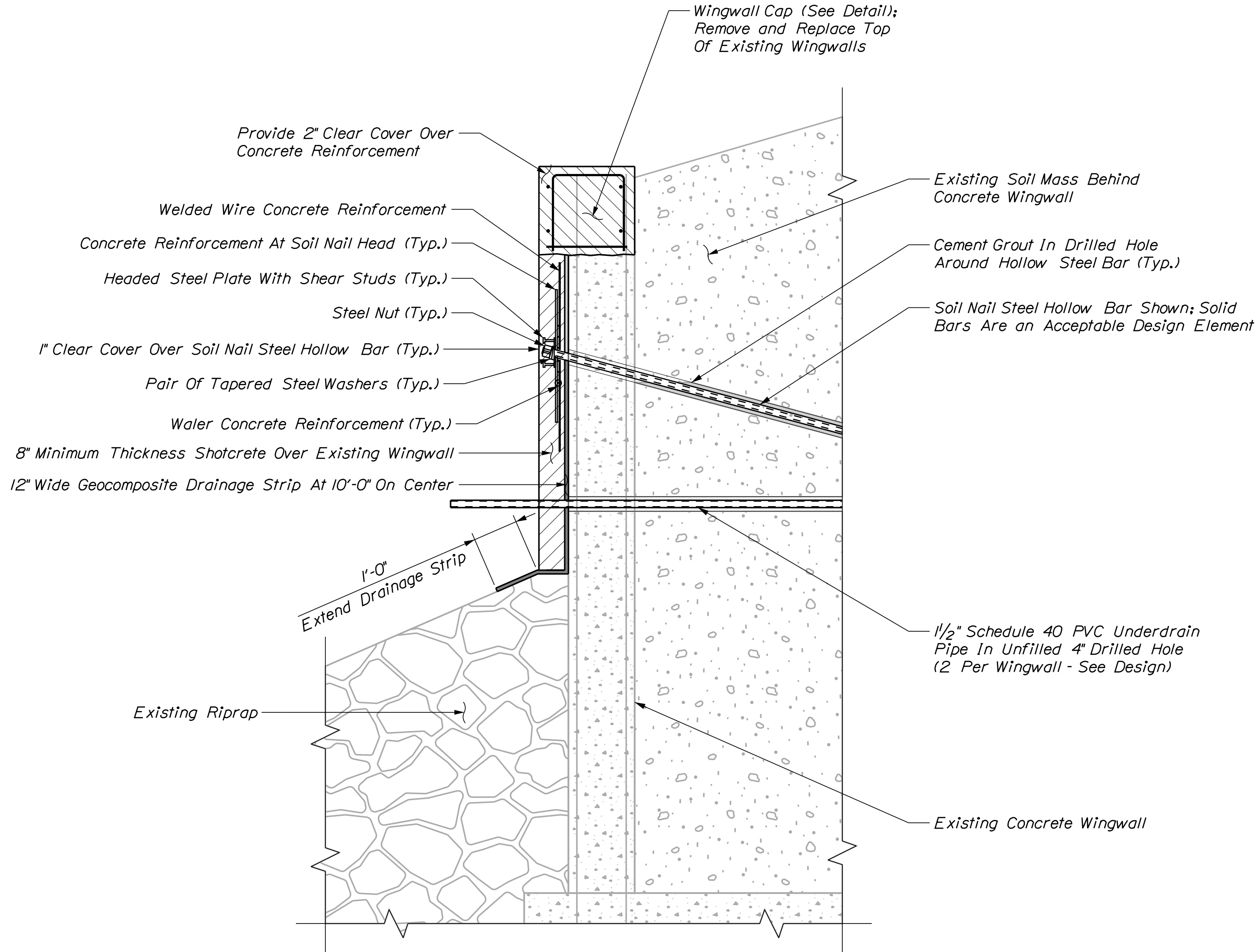
Username: Richard.Mayer

Division: BRIDGE

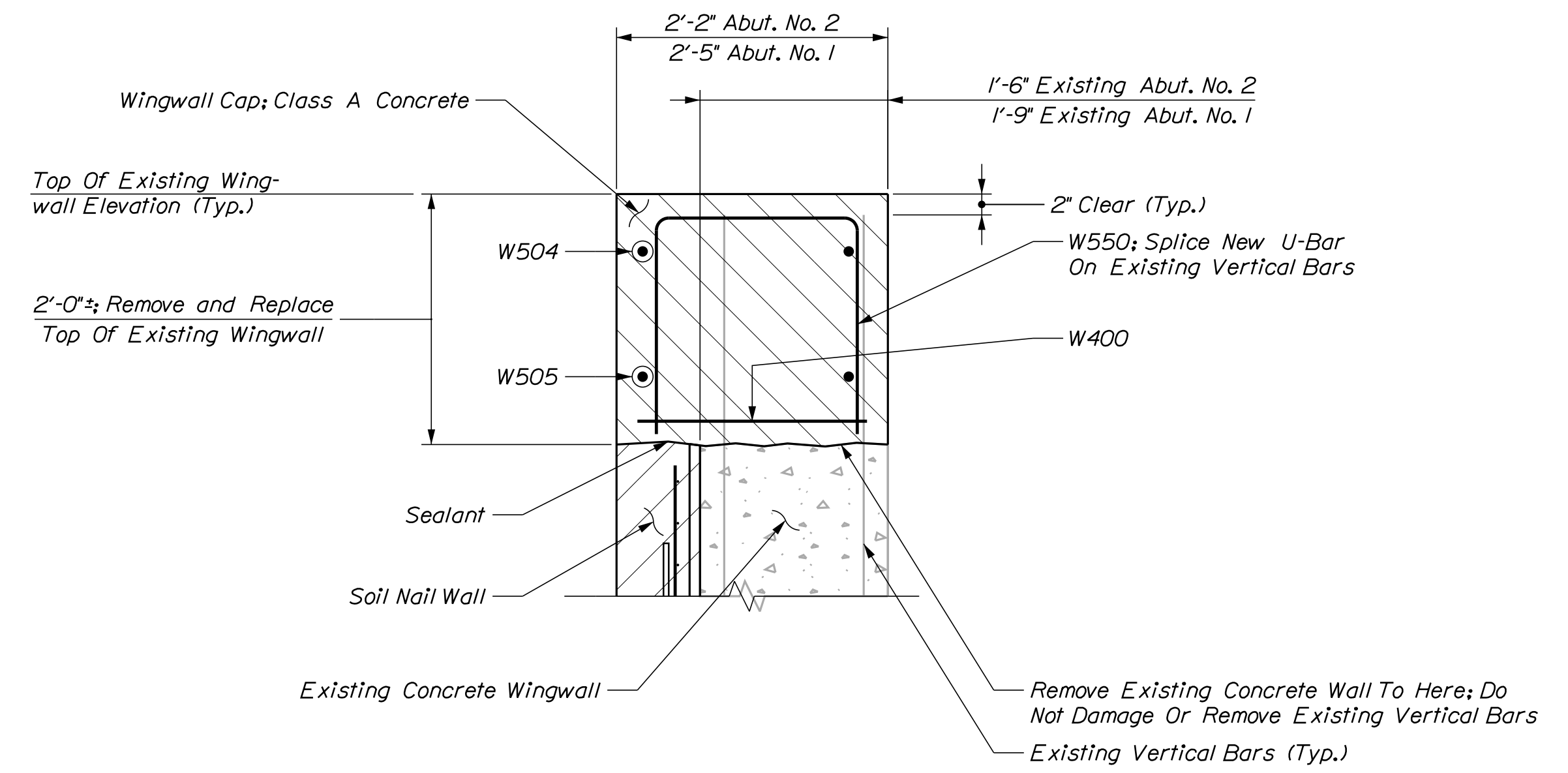
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**NOTE**

- 1. Sealant to be applied immediately prior to Shotcrete application, 3" from face of wall. Sealant to be equal to Sika Leakmaster LV-Z. Bead to be 3/4" wide and 3/16" thick. Work to be incidental to other Contract items.
- 2. All Shotcrete surfaces to be troweled to a smooth, reasonably uniform condition with no bumps apparent at Soil Nail heads.



**SOIL NAIL WALL TYPICAL SECTION**  
Wingwall "R2" Shown; Others Similar



**WINGWALL CAP DETAIL**  
Wingwall "R2" Shown; Others Similar

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

022362.00

WIN

BRIDGE NO. 2841

BRIDGE PLANS

SIGNATURE

DATE

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DATE

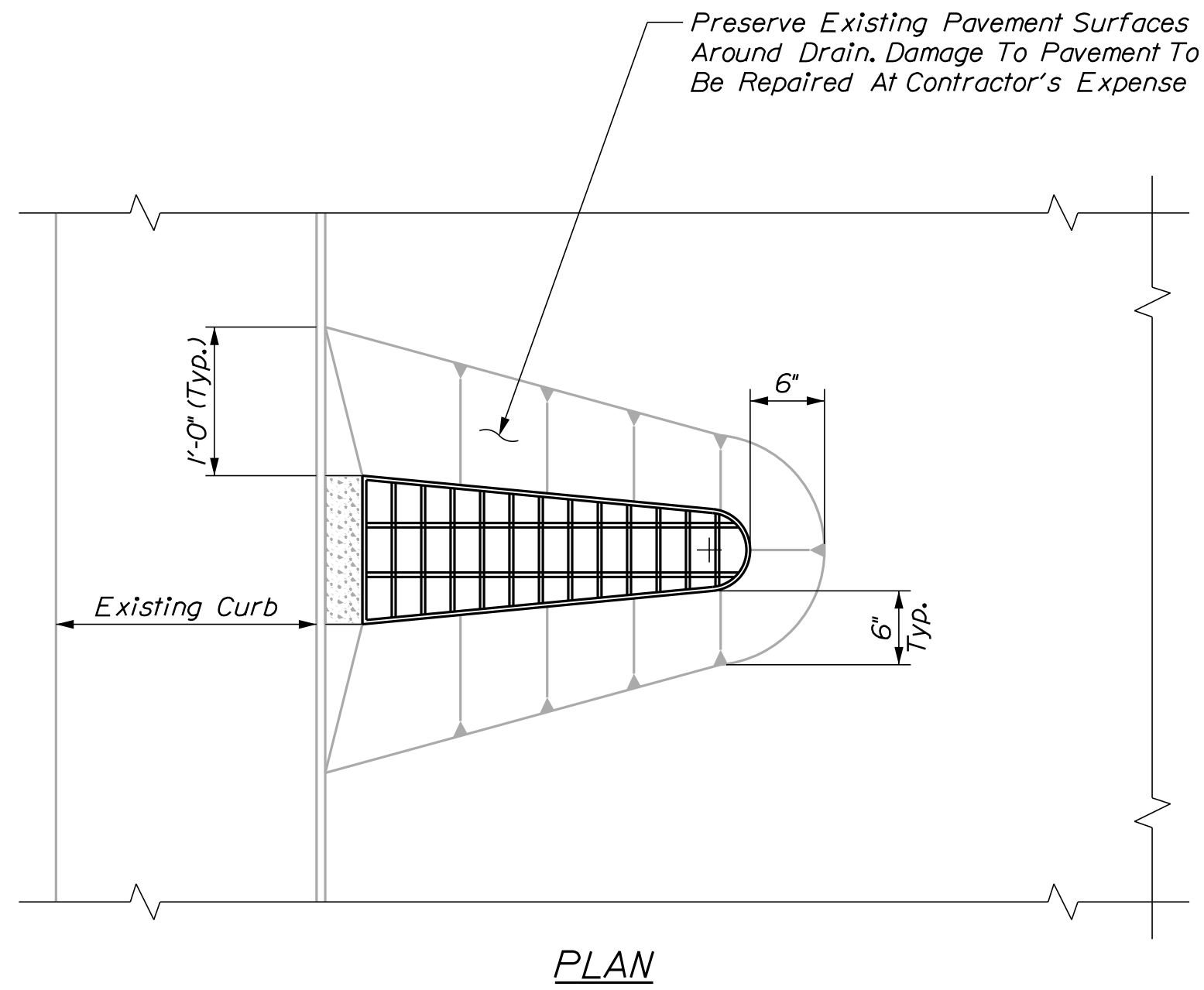
PROJ. MANAGER  
DESIGN DETAILED  
CHECKED/REVIEWED  
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DESIGN DETAILED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

THE FORKS BRIDGE  
KENNEBEC RIVER  
THE FORKS WEST FORKS SOMERSET COUNTY  
WINGWALL DETAILS

SHEET NUMBER

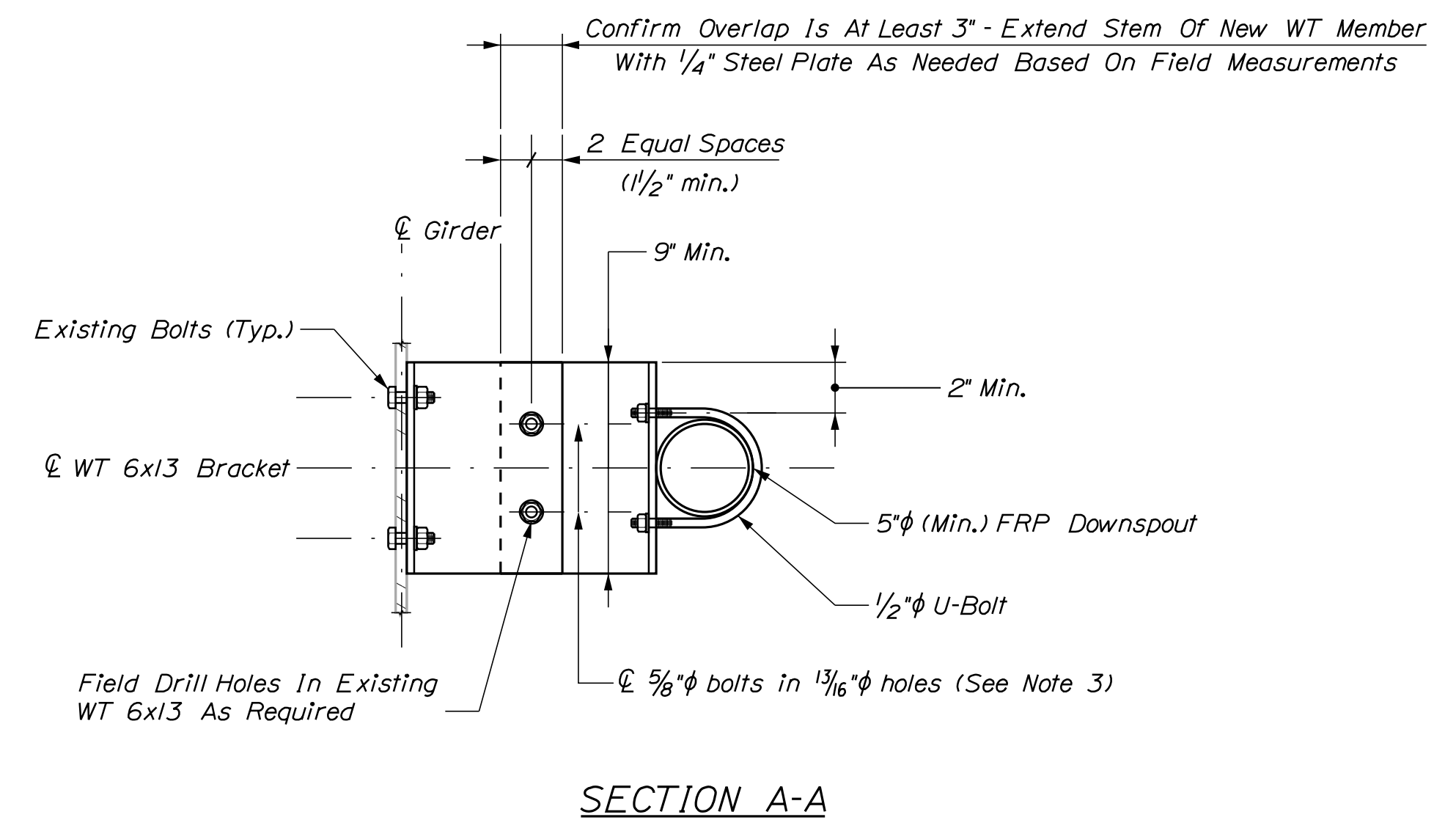
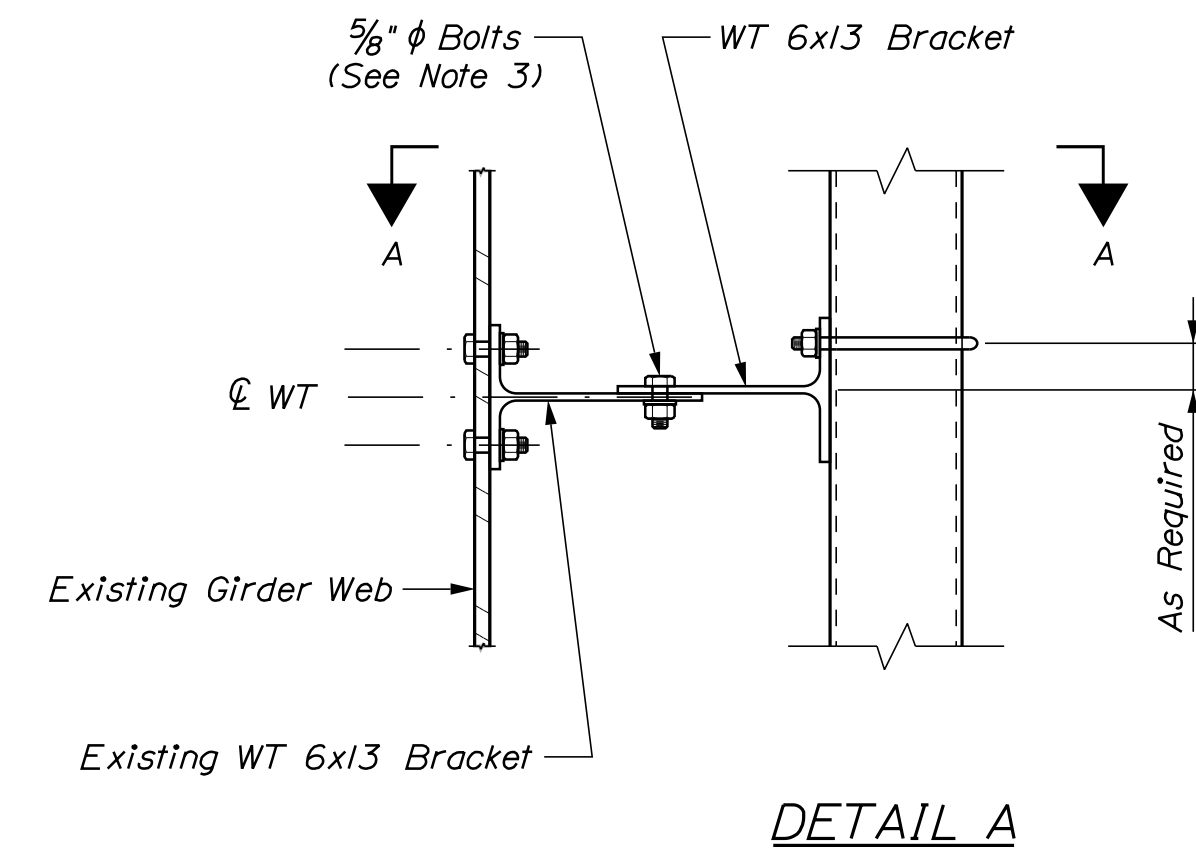
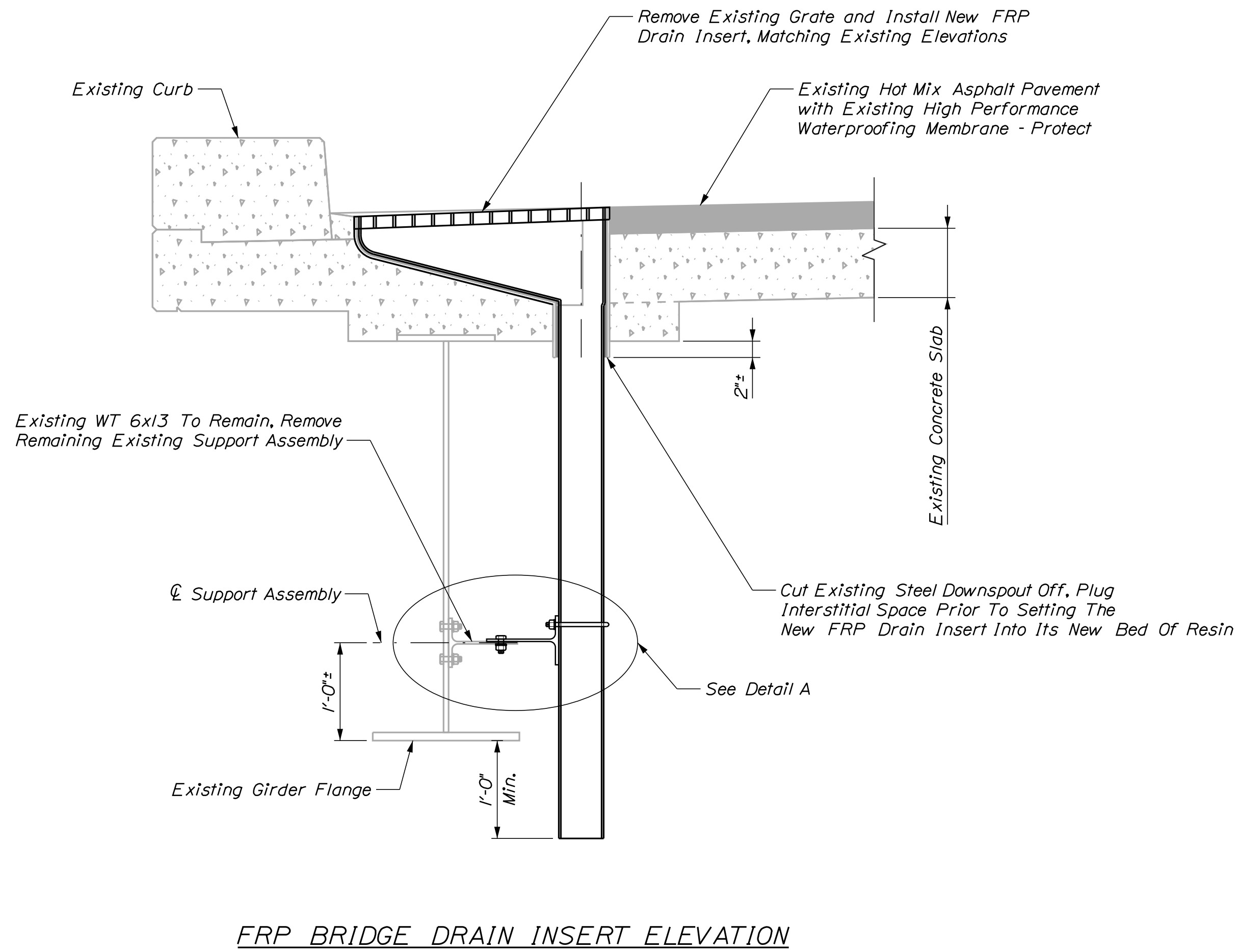
6

OF 8



**FRP BRIDGE DRAIN INSERT NOTES**

1. FRP Bridge Drain Inserts shall be designed and detailed based on the dimensions for the bridge drain details shown, and in accordance with Special Provisions Section 502, Fiber Reinforced Polymer Bridge Drain Inserts.
2. Support assembly components and all hardware shall meet the grade requirements of ASTM A36 and/or ASTM A307
3. Webs of new WT and existing WT member may be field welded in lieu of bolting shown. Minimum allowable weld size 8" long.
4. See Special Provision.



STATE OF MAINE	BRIDGE PLANS
DEPARTMENT OF TRANSPORTATION	WIN
022362.00	22362.00
	BRIDGE NO. 2841

DESIGNER	
CHECKED	
DESIGNED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

PROJ. MANAGER	DATE
M. PARLIN	JUNE 2023
CHECKED	BY
M. GRAY	R. MAYER
DESIGNED	DATE
M. GRAY	JUNE 2023
REVISIONS 1	SIGNATURE
REVISIONS 2	
REVISIONS 3	P.E. NUMBER
REVISIONS 4	DATE
FIELD CHANGES	

THE FORKS BRIDGE  
KENNEBEC RIVER  
THE FORKS/WEST FORKS SOMERSET COUNTY  
**FRP BRIDGE DRAIN INSERT**

SHEET NUMBER

7

Town, County, State \_\_\_\_\_  
 Approx. Property Lines \_\_\_\_\_  
 Existing Right of Way \_\_\_\_\_  
 Limits of Wrought Portion \_\_\_\_\_  
 Control Of Access \_\_\_\_\_  
 New Right of Way \_\_\_\_\_  
 New Easement \_\_\_\_\_  
 New Temporary Rights \_\_\_\_\_  
 New R/W Within Existing R/W \_\_\_\_\_

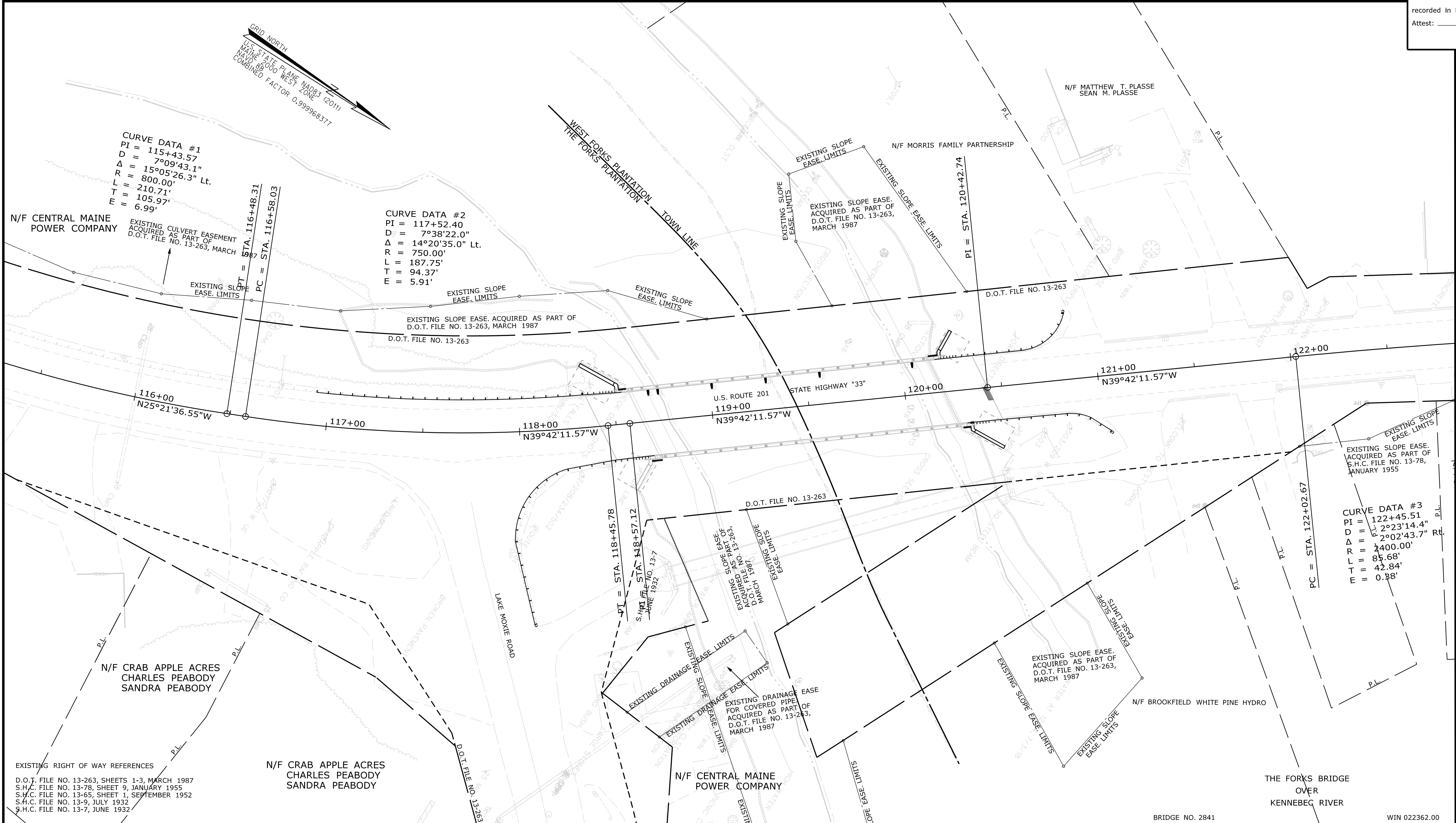
New R/W Along Existing R/W \_\_\_\_\_  
 Building \_\_\_\_\_  
 Trees Conifer \_\_\_\_\_  
 Tree Line \_\_\_\_\_  
 Water Edge \_\_\_\_\_  
 Ledge \_\_\_\_\_  
 Fence \_\_\_\_\_  
 Sign \_\_\_\_\_  
 Clearing Limit Line \_\_\_\_\_  
 Bush Line \_\_\_\_\_  
 Rock/Boulder \_\_\_\_\_  
 Flag Pole \_\_\_\_\_  
 CHAIN LINK \_\_\_\_\_  
 BARB WIRE \_\_\_\_\_  
 WELL \_\_\_\_\_  
 STOCKADE \_\_\_\_\_  
 Mailbox \_\_\_\_\_

**PLAN LEGEND**  
 Existing \_\_\_\_\_ Proposed \_\_\_\_\_  
 Sanitary Sewer \_\_\_\_\_  
 Telephone Line \_\_\_\_\_  
 Electric Line \_\_\_\_\_  
 Water Line \_\_\_\_\_  
 Underdrain Line \_\_\_\_\_  
 Gas Line \_\_\_\_\_  
 Guardrail \_\_\_\_\_  
 Culvert \_\_\_\_\_  
 Traveled Way \_\_\_\_\_  
 Ditch \_\_\_\_\_  
 Catch Basin \_\_\_\_\_  
 Manhole \_\_\_\_\_  
 Sewer Manhole \_\_\_\_\_  
 Utility Pole \_\_\_\_\_  
 Fire Hydrant \_\_\_\_\_  
 Curbing \_\_\_\_\_

Existing \_\_\_\_\_ Proposed \_\_\_\_\_  
 Cut Line \_\_\_\_\_  
 Stonewall \_\_\_\_\_  
 Baseline \_\_\_\_\_  
 Monument \_\_\_\_\_  
 Iron Rod Found \_\_\_\_\_  
 Replacement Pin Set \_\_\_\_\_  
 Fill Line \_\_\_\_\_  
 Retaining Wall \_\_\_\_\_  
 Traverse Point \_\_\_\_\_  
 Pipe Found \_\_\_\_\_

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

STATE OF MAINE  
 REGISTRY OF DEEDS  
 COUNTY \_\_\_\_\_  
 RECEIVED \_\_\_\_\_  
 at \_\_\_\_\_ h \_\_\_\_\_ m \_\_\_\_\_ M and  
 recorded in Plan Bk \_\_\_\_\_, Pg. \_\_\_\_\_  
 Attest: \_\_\_\_\_ REGISTER



Date: 6/27/2023

Username: Richard.Mayer

Division: BRIDGE

Filename: ... \00\ROW\MSTA001\_RWP\PLANI.dgn

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	PNS	
FINAL RIGHT OF WAY		
AREAS		

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460  
 THE FORKS PLANTATION\ WEST FORKS PLANTATION  
 RIGHT OF WAY MAP

REVISIONS			PLAN FILED IN PLAN BOOK				COUNTY RECORD			
NO.	DATE	DESCRIPTION	BY	NO.	GRANTOR	PAGE	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE  
 COMMISSIONER  
 JOYCE NOEL TAYLOR  
 CHIEF ENGINEER  
 DATE \_\_\_\_\_

STATE HIGHWAY "33"  
 U.S. ROUTE 201  
 THE FORKS PLANTATION \ WEST FORKS PLANTATION  
 SOMERSET COUNTY  
 FEDERAL AID PROJECT NO. 2236200  
 JUNE 2023  
 SCALE 1" = 25'  
 RIGHT-OF-WAY MAP  
 SHEET 1 OF 1

SHEET NUMBER  
 8  
 OF 8